

2018

Annual
report

DEPARTMENT FOR ANTI-DOPING OF
THE CROATIAN INSTITUTE FOR
TOXICOLOGY AND ANTI-DOPING
(CITA)

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INTRODUCTION

The basic goal of the Department for Anti-Doping (hereinafter: Department) of the Croatian Institute for Toxicology and Anti-Doping (hereinafter: CITA) is the protection of athletes' basic rights to participate in sports without doping and to promote health, fairness and equality for all athletes in that manner.

This goal is achieved through creation and implementation of harmonized, uniformed and effective anti-doping programs at national and international levels.

In achieving the goal and through its Department, CITA proposes and implements measures in the fight against doping, applies the CITA Anti-Doping Rules, the Articles of the UNESCO convention, the WADA's Code (World Anti-Doping Agency), rules of international sports federations and the International Olympic Committee, and conducts systematic monitoring and coordinating of activities of government and non-governmental organizations.

In the fight against doping, CITA cooperates with the Ministry of Health, Ministry of Education, Science and Sport, the Ministry of the Interior, the State Attorney's Office, the Office of the Ombudsman for Children, the Ministry of Foreign and European Affairs, Ministry of Culture – UNESCO Office, the Agency for Medicinal Products and Medical Devices, the Office for Combating Narcotic Drug Abuse and national anti-doping organizations from other countries.

CITA's non-governmental partners in the fight against doping in sport are UNESCO, WADA, the Council of Europe, iNADO, the Croatian Olympic Committee, the Croatian Paralympic Committee, the Croatian Olympic Committee's Health Commission, the School of Medicine, University of Zagreb, the Croatian Medical Chamber, the Faculty of Kinesiology, University of Zagreb, the Croatian Olympic Academy, the Croatian School Sports Federation, UEFA and other international and national sports federations and clubs.

In 2018, the Department was active in seven main areas:

1. Implementation and improvement of legal framework

2. Conducting doping controls, investigations and results management
3. Doping prevention
4. International cooperation
5. Issuing Therapeutic Use Exemptions
6. Medicine and science
7. Premises and equipment maintenance.

1. IMPLEMENTATION AND IMPROVEMENT OF LEGAL FRAMEWORK

By means of its Anti-Doping Rules, in 2018 CITA continues to implement the Articles of the World Anti-Doping Agency's Code, the International Standard for Therapeutic Use Exemptions, the International Standard for Testing and Investigations, the International Standard for the Protection of Privacy and Personal Information, the International Standard for Laboratories and the Prohibited List and the International Standard on Compliance with the Code.

On March 9, 2018, the World Anti-Doping Agency (WADA) confirmed full compliance of the work by the Croatian Institute for Toxicology and Anti-Doping as the national anti-doping organisation with the Articles of the World Anti-Doping Code. This confirmation followed upon WADA's monitoring of all forms of anti-doping activity performed by CITA during 2017 and 2018, and after it made sure CITA's standards of procedure in the field of anti-doping were fully compliant with the World Code. WADA monitored the compliance of activities of anti-doping organizations with the Articles of the Code and International Standards, and, at the end of March 2018, confirmed 26 of 307 anti-doping organizations around the world are fully compliant, 16 of which are national organizations, 11 of which European, including CITA. At the same time, this confirmation is an obligation to continuously improve the quality of work and cooperation with other anti-doping organizations in order to perform their basic task in the best possible way, namely to protect clean athletes and preserve the spirit of sport.

CITA Department for Anti-Doping continued the initiative to amend national legislation in relation to anti-doping in sport at the Ministry of Health, Central State Office for Sports and Croatian Olympic Committee in order to better align the position of the national anti-doping organization with the UNESCO Convention, the World Anti-Doping Code and the Council of Europe Convention, and to act in accordance with Article 10.10 and Chapter 12 of the CITA Anti-Doping Rules, which is not possible at this moment due to the position of the anti-doping organization.

On February 28, 2018, the Central State Office for Sports again sent a request, based on the request by the Head of Department dated February 16, 2018, to the Minister of Health asking for the

initiative to establish an independent and autonomous national anti-doping organization to be continued.

On April 5, 2018, World Anti-Doping Agency Deputy Director General Rob Koehler, in a reply to an inquiry by the president of COC and Head of the Department for Anti-Doping about a need to establish an independent national anti-doping organization in Croatia, pointed out the World Anti-Doping Agency has been advocating the importance of strengthening national anti-doping organizations through the development of independent structures whose sole purpose is to protect clean sport.

On May 3, 2018, CITA submitted its opinion on the Healthcare Act proposal via e-savjetovanje portal, requesting it should provide for the establishment of an independent national anti-doping organization.

On May 7, the Head of the CITA Department for Anti-Doping warned the Minister of Health with a letter about the need to harmonize the legal status of the national organization for the fight against doping with the Articles of the Act Ratifying the International Convention against Doping in Sport (OG, International Agreements 07/2007), and which should be achieved through amendments to the Healthcare Act. The letter states that, given the immediate forthcoming presidency of the Republic of Croatia of the Council of Europe and the European Union in 2020, the establishment of an independent national anti-doping organization can only have positive political and status consequences for the Republic of Croatia since the fight against doping in sport is considered one of the standards of human rights protection. At the same time, it would be possible to avoid possible negative effects during the upcoming inspection visits by the Council of Europe Anti-Doping Monitoring Group and the World Anti-Doping Agency.

With his letter dated September 4, 2018, the Head of the CITA Department for Anti-Doping warned the State Secretary for Sports that the anti-doping activities within CITA do not fulfil the obligation of legal and real independence of the national anti-doping organization. He also warned that the Government's conclusion on accepting the proposal to reduce the number of agencies, institutes, funds, foundations, companies and other legal persons associated with public authorities, and the planned merger of CITA with CIPH dated August 2, 2018, which stipulates the anti-doping activity shall be preformed in the CIPH organizational unit, also does not fulfil the obligation of NADO's

independence in operational decisions and activities. Following this warning, on September 19, 2018, the State Secretary for Sports sent a letter to the Deputy Prime Minister of the Government of the Republic of Croatia and Minister Tomislav Tolušić, as well as the Minister of Health prof. Milan Kujundžić PhD, warning them about the inappropriate status of the national anti-doping organization. In the letter, the State Secretary advocates the initiative to establish an independent and autonomous national anti-doping organization to be continued. The Central State Office for Sport in cooperation with the CITA Department for Anti-Doping requested an evaluation visit by the Monitoring Group of the Council of Europe Sport Convention in order to meet the obligations of the Council of Europe Anti-Doping Convention, and relevant recommendations governing sporting activities, primarily the European Sports Charter and the Code of Sport Ethics.

The initiative launched by the Ministry of Health for the harmonization of the List of substances prohibited in sports with the 2018 Prohibited list, and for the purposes of the Criminal Code, resulted in a meeting of the working group at the Ministry of Health. At a meeting held on November 13, 2018, a draft of the List of substances prohibited in sports for the purposes of the Criminal Code was agreed, as well as to continue the work within a short period of time.

The Department for Anti-Doping submitted proposals to amend the Code to the working group of the World Anti-Doping Agency in charge of writing a proposal of the new Code. The adopted text of the new Code will enter into force on January 1, 2021. Along with the proposals, the Department expressed its regret over WADA's founding committee's decision to limit the changes to the Code to a number of areas that did not include Article 4.3. The fact the changes of the stated Article were discussed twice is not a good enough reason not to discuss it again, given it is a fundamentally important Article. In its annex to the consultations in the first and the second phase, the Croatian national anti-doping organization emphasized the need to amend the above Article in accordance with the wording of the first draft of the 2015 Code.

International Standard on Compliance with the Code, which came into force of April 1, 2018, is translated into Croatian language and is publicly available on the official website of the CITA Department for Anti-Doping.

The 2015 World Anti-Doping Code, with its amendments in 2018, entered into force in April 2018, and is translated into Croatian language. The translation was printed in 500 copies and is publicly available on the official website of the CITA Department for Anti-Doping.

2. DOPING CONTROLS, INVESTIGATIONS AND RESULTS MANAGEMENT

The testing in 2018 was conducted in accordance with the 2018 Testing plan and WADA Technical Document for Sport Specific Analysis (TDSSA). In accordance with international trends in the fight against doping, testing is increasingly being planned and implemented in accordance with data collected from various sources related to the possible use of prohibited substances and resources.

Testing

The 2018 Testing plan was created in accordance with Article 4.2 of the WADA International Standard for Testing and Investigation, in which risk factors for each sport were estimated, taking into account the history of doping and the popularity of certain sports in the Republic of Croatia. Based on experience from previous years, we are planning to increase the number of testing in sports with the highest estimated likelihood of doping. The WADA Technical Document for Sport Specific Analysis (TDSSA2018) was consistently applied in the Testing plan.

In 2018, a total of 592 doping controls were conducted in the national program, 286 of which in-competition, and 306 out-of-competition. 86 blood tests, and 506 urine tests were performed (as biological material).

110 tests on exogenous administration of erythropoiesis-stimulating agents, 82 tests on exogenous administration of growth hormone release factors, and 65 tests on exogenous administration of the growth hormone were performed.

As part of the international cooperation a total of 271 doping controls were conducted, 265 of which in-competition, and 6 out-of-competition. 271 urine tests were performed (as biological material).

Doping controls in the national program

SPORT	IN-COMPETITION	OUT-OF-COMPETITION
swimming	15	10
water polo	20	20
athletics	40	31
cycling	0	18
gymnastics	6	15
karate	6	6
powerlifting	16	0
kickboxing	6	0
rowing	6	12
sailing	0	6
boxing	15	9
archery	0	3
judo	4	19
savate	0	1
taekwondo	6	7
diving	4	4
volleyball	16	14
football	36	28
wrestling	6	12
handball	30	20
basketball	38	22
weightlifting	11	2
bob	0	3
futsal	3	0
handball-deaf	0	20
ice hockey	0	3
athletics-paralympic athletes	2	0
abp	0	21

Doping controls at international sport events in Croatia

SPORT	IN-COMPETITION	OUT-OF-COMPETITION
volleyball	0	0
athletics	22	0
gymnastics	6	0
football	0	0
basketball	0	0
handball	96	4
water polo	23	0
swimming	0	0
fencing	2	0
ice hockey	0	0
judo	33	0
sailing	0	0
taekwondo	0	1
cycling	0	0
wrestling	25	0
archery	2	0
rowing	0	0
boxing	0	0
karate	24	0
diving	0	0
futsal	0	0
handball-deaf	0	0
skying-paralympic athletes	4	0
weightlifting	0	0
luge	0	0
bob	0	0
powerlifting	0	0
kickboxing	0	0
fishing	2	0
synchronized skating	6	0
athletics-paralympic athletes	2	0
MMA	0	1
kayak canu	12	0
savate	0	0
rock n roll	6	0

In cooperation with international sports institutions, athletes were tested during major sports events in the Republic of Croatia, namely, the World Para Alpine Skiing Cup slalom race, the Junior Fencing World Cup, Women's EHF Cup, the Gymnastics World Cup, the World League Water Polo, the Judo Grand Prix, the World Junior Synchronized Skating Championship, European Championship in Acrobatic Rock 'n' Roll, Kayak Canoe European Championship, 100 km World Championship, and a number of international tournaments in various sports in the Republic of Croatia.

In accordance with Article 4.2 of the International Standard for Testing and Investigation, we have created a Test plan with the minimum number of required analyses and in accordance with the Technical Document for Sport Specific Analysis TDSSA2018. CITA implemented the Plan, and WADA monitored and controlled the implementation.

Since 2014, CITA has been involved in the steroidal module of the athlete biological passport program, which is very reliable in detecting the lowest concentrations of exogenously administered substances of S1 category (anabolic steroids) belonging to unspecified substances. The implementation of this program continued in 2018.

In agreement with WADA and the Seibersdorf Laboratory in the second half of 2017, a haematological module for the athlete biological passport was introduced. In 2018, the haematological module of the athlete biological passport program included seven athletes.

Monitoring of sport specific analyses was enabled by the enhancement of the APLIKAT program.

Registered Testing Pool

At the beginning of the year there were 47 athletes in the Registered Testing Pool, and at the end of the half-year period in the Registered Testing Pool there are 46 athletes (one athlete retired). Athletes were provided with assistance in delivering their Whereabouts data, education and a 24/7 availability via telephone. The WADA Technical Document for Sport Specific Analysis was applied to the Registered Testing Pool in accordance with the Testing plan.

Doping Control Officials

Supervision of the work of the Doping Control Officials was carried out on a broader scale than in previous years, in accordance with the new requirements of the Technical Document for Sport Specific Analysis. In-competition supervision was conducted at international competitions, Croatian championships and league competitions in accordance with the Testing plan.

On March 27, 2018, the annual meeting with Doping Control Officials was held in Zagreb. At the meeting, previous year was analysed with the aim of achieving the highest standard of doping controls.

On September 24 and 25, a course for 7 new Doping Control Officials was held.

Testing program support

Monitoring of sport specific analyses was enabled by the enhancement of the APLIKAT program.

Sample management

In order to strengthen the chain of custody and preserve the quality of samples for analysis as much as possible, in addition to the existing measures and a storage and warning system, additional procedures for improving the quality of samples during transport using portable cool boxes with data logger were introduced in accordance with the Articles of the International Standard for Testing and Investigation.

Investigation and data collection

In the first part of 2018, an officer was appointed to collect, evaluate and use data related to violation of anti-doping rules whose work and activities are integrated into the Testing Section of the Department for Anti-Doping of the Croatian Institute for Toxicology and Anti-Doping. A Protocol for the collection, evaluation and use of data related to violation of anti-doping rules was adopted. The aim is to improve the work and achieve even better results in this manner as well.

The “Speak up (Prijavi doping)” portal was launched on the website of the Department for Anti-Doping, where all interested parties can anonymously report an anti-doping rule violation. We hope athletes, sports officials and fans in Croatia will take advantage of this opportunity and contribute to the fight for clean sport by reporting cases of doping.

Whereabouts failures

In 2018, there were eleven missed controls.

Results management

Hearing panel

As part of the results management, eight sessions of the CITA Hearing panel were held. One athlete submitted an appeal for the reduction of the period of ineligibility imposed by a final decision SP 03/16, but it was established there were no grounds for granting the appeal, and it was rejected. Five athletes tested positive for prohibited substances, and were prohibited from competing and participating in all sports activities for a period from one to four years due to violation of the Article 2.1 of the Rules. One athlete refused to attend the doping control, as well as to sign the Notification about a doping control, and was prohibited from competing and participating in all sports activities for a period of four years due to violation of the Article 2.3 of the Rules. Session SP 08/18, held on December 17, 2018, was postponed due to the submission of additional information.

On December 28 and December 31, 2018, two more disciplinary proceedings were initiated for violation of Article 2.1 of the Rules. The proceedings are in progress.

In 2018, CITA Hearing panel held eight (8) sessions for violation of Articles of the CITA Anti-Doping Rules:

Table of sessions of the Hearing panel

Session date	Sport	Person in violation	Type and category of substances from the List	Disciplinary measure	Violated Article of the Rules
February 6, 2018 SP 01/18	cycling	athlete	-	request for the reduction of period of ineligibility denied	-
April 20, 2018 SP 02/18	swimming	athlete	furosemide (cat. S5)	1 year of ineligibility	2.1
May 11, 2018 SP 03/18	wrestling	athlete	amphetamine (cat. S6.a)	4 years of ineligibility	2.1
May 28, 2018 SP 04/18	weightlifting	athlete	exogenous testosterone and testosterone metabolites (cat. S1.a)	4 years of ineligibility	2.1
July 12, 2018 SP 05/18	boxing	athlete	Carboxy-THC (cat. S8)	2 years of ineligibility	2.1
September 6, 2018 SP 06/18	powerlifting	athlete	Drostanolone (cat. S1.a), Metandienone metabolite (cat. S1.a) i Norandrosterone (cat. S1.b)	4 years of ineligibility	2.1
September 19, 2018 SP 07/18	powerlifting	athlete	-	4 years of ineligibility	2.3
December 17, 2018 SP 08/18	handball	athlete	Octopamine (cat. S6.b)	ongoing	2.1
- SP 09/18	volleyball	athlete	Carboxy-THC (cat. S8)	ongoing	2.1
- SP 10/18	basketball	athlete	Terbutaline (cat. S3)	ongoing	2.1

Appeal panel

In 2018, CITA Appeal panel held two sessions. In the case number ŽP 01/18, the Appeal panel partially granted the athlete's appeal in the part about the disciplinary measure for violation of

Article 2.1 of the Rules, in a way that the period of ineligibility begins with the date of the collection of the samples (one month earlier). In the case number ŽP 02/18, the athlete's appeal was granted in the part about the disciplinary measure, and he was prohibited from competing and participating in all sports activities for a period of eight (8) months for a violation of Article 2.1 of the Rules.

In 2018, CITA Appeal panel held two (2) sessions for violation of Articles of the CITA Anti-Doping Rules:

Table of sessions of the Appeal panel

Session date	Sport	Person in violation	Type and category of substances from the List	Disciplinary measure	Violated Article of the Rules
April 20, 2018 SP 02/18	swimming	athlete	furosemide (cat. S5)	imposed sanction confirmed – 1 year of ineligibility	2.1
July 12, 2018 SP 05/18	boxing	athlete	Carboxy-THC (cat. S8)	reduction of the period of ineligibility – imposed period of ineligibility of 8 months	2.1

3. DOPING PREVENTION

As in the previous year, we continued to inform and educate target groups on the harmful consequences of doping and the applicable regulations. Target groups were athletes from the Registered Testing Pool, professional athletes, athletes competing in top leagues, international athletes, athletes competing in “sports at risk”, Olympic candidates, and other participants in top sport (trainers, physicians, physiotherapists, etc.). The education was performed in form of lectures, through the Athlete Outreach Program, the NE!DOPINGU magazine, our website, brochures and flyers, and other activities.

Lectures

During 2018, a total of twenty-three (23) lectures were held, in addition to lectures in the course for continuous education (“Doping in Sport”) and an expert panel for educators (“Prevention of doping in school population”). About 700 people took part in this form of education.

Table with lectures held in 2018

Date	Venue	Group	Number of participants
January 18, 2018	Zagreb, MEF (KB Dubrava)	medical students	20
January 20, 2018	Krapinske toplice	Croatian Wrestling Coaches Association	70
February 8, 2018	Zagreb, MEF (KB Dubrava)	medical students	12
March 8, 2018	Rabac	MTB team	20
March 13, 2018	Brodarica	road cycling team	20
April 12, 2018	Zagreb, VERN University	journalism students (3rd year)	30
April 25, 2018	Zaprešić	NK Inter	25
April 26, 2018	Koprivnica	NK Slaven Belupo	25
April 27, 2018	Zagreb	NK Ruđeš Deportivo	25
May 5, 2018	Zagreb, ŠNZ A. Štampar	medical students (3rd year) (CROMSIC)	20
May 5, 2018	Osijek	NK Osijek	35
May 5, 2018	Vinkovci	NK Cibalia	22
May 3, 2018	Zagreb	NK Lokomotiva	25
May 10, 2018	Pula	NK Istra 1961	20
May 11, 2018	Rijeka	NK Rijeka	35
May 16, 2018	Split	NK Hajduk	35
May 17, 2018	Zagreb	NK Dinamo	30
June 3, 2018	Đurđevac	Community of sports associations, city of Đurđevac	15
July 11, 2018	Zagreb	MtM World Wrestling Association camp	50
September 5, 2018	Velika Gorica	NK Gorica	35
September 23, 2018	Tuheljske toplice	Croatian Swimming Federation (coaches, sports officials)	40
September 29, 2018	Opatija	Symposium "Doping in top sport" (COC)	30
November 19, 2018	Zagreb, MEF (KB Dubrava)	MEF students	33
TOTAL			672

In the reporting period, the good cooperation with the Croatian Olympic Committee's Health Commission was continued in which we presented the 2018 Prohibited list.

"Doping in sport" course

During 2018, CITA Department for Anti-Doping organized two (2) postgraduate courses named "Doping in sport" in cooperation with the Faculty of Medicine of the University of Zagreb and the

Croatian Medical Chamber. As part of the courses, a total of sixteen thematic lectures were held. The course was awarded with eight points for listeners (8) and ten (10) points for lecturers by the Croatian Medical Chamber.

Table with postgraduate courses “Doping in sport” held in 2018

Date	Venue	Group	Number of participants
April 6, 2018	Zagreb, CITA counselling for anti-doping and rational pharmacotherapy	doctors of medicine	4
14. 04.2018	Zagreb, CITA counselling for anti-doping and rational pharmacotherapy	doctors of medicine	10
TOTAL			14

Course “Prevention of doping in school population”

During 2018, CITA Department for Anti-Doping organized an expert panel called “Prevention of doping in school population”. The course was held at the Ministry of Science and Education. As part of the course, a total of eleven (11) thematic lectures were held, which were attended by approximately 50 educators. The purpose of this course is to train educators to educate the school population in the field of anti-doping with the aim of preventing doping. The plan is to hold these courses in regional centres, and to adopt guidelines to be applied by educators in anti-doping education.

Table with courses “Prevention of doping in school population” held in 2018

Date	Venue	Group	Number of participants
May 21, 2018	Zagreb (Ministry of Science)	educators	50
TOTAL			50

“Just sport” project

In June 2018, an expert panel was organized by Rijeka Sports Federation as part of the international “Just sport” project, aimed at preventing doping in recreational sports.

The CITA Department for Anti-Doping participated in a panel discussion on the "Synergy of public institutions and sports associations in preventing doping in a recreational environment". The discussion included the following participants: The Croatian Olympic Committee, the Central State Office for Sports, the Ministry of Health, the Ministry of Science and Education, the Croatian Institute for Toxicology and Anti-Doping, the School of Public Health and the representative of the City of Rijeka. The panel discussion on Doping - prevention in recreational athletes included representatives of national anti-doping organizations from the following countries: Sweden, Slovenia, Denmark, Bulgaria, Austria, Portugal, Italy and Croatia. The discussion focused on a significant problem of uncontrolled use of various supplements, dietary supplements and doping among recreational athletes.

Athlete Outreach

In the same period, eleven (11) Athlete Outreach Programs were implemented with a total of twenty-four (24) Athlete Outreach Days – about 1200 people were educated.

Table with Athlete Outreach Programs held in 2017

Date	Venue	Name	Number of days	Number of people educated
February 17, 2018	Zagreb	Croatian Judo Championship	1	70
March 9 - 11, 2018	Zagreb	“Doping nije hOKej”	3	100
March 14 and 15, 2018	Zagreb	ISU Pure as Ice	3	200
March 24, 2018	Petrinja	Croatian Wrestling Championship	1	90
March 26 and 27, 2018	Zagreb	World Ice Hockey Championship (U-18)	2	120
April 21, 2018	Zagreb, Bundek	Sportske novosti cross race (Play True Day)	1	150
20.-25.04.2018	Poreč	Final stage of the State Championship of Primary and Secondary Schools	6	200
May 24 and 25, 2018	Zagreb	Croatian Senior Boxing Championship	2	70
September 22, 2018	Zagreb	European Week of Sport	1	30
June 4, 2018	Zagreb	Cadet World Wrestling Championship	2	100
October 25 and 26, 2018	Zagreb	30th Figure Skating Competition	2	70
TOTAL			24	1200

Printed materials

The 2018 Prohibited list was printed at the end of 2017 with a total of 1,000 copies in standard format and 1,000 pocket-sized copies, and it was distributed to users in January. The List has also been posted on the website of the Institute since mid-December 2017.

At the end of 2018, the 2018 Prohibited list was created and printed with a total of 1,500 copies in standard format.

During 2018, six (6) issues of the NE!DOPINGU magazine were published (each in 600 copies), out of a total of six planned for 2018. The magazine was distributed to national federations, sports clubs, schools, health institutions, athletes, sports officials and members of the Commissions within the CITA Department for Anti-Doping.

WADA Alpha

The Department for Anti-Doping, in cooperation with WADA, worked on the promotion of the ALPHA project (Athlete Learning Program about Health and Anti-Doping). The ALPHA online education program in the Croatian language was posted on the website of the CITA Department for Anti-Doping in 2017, making it accessible to athletes and other persons who have an interest in online education in the field of anti-doping. It is a program designed for comprehensive education of athletes in the field of anti-doping, which includes a knowledge assessment and enables the obtaining of certificates. During the reporting period, and in cooperation with WADA, the Croatian version of the ALPHA program was set up on a new platform. The new platform enables monitoring persons included in the ALPHA program, which is significant for the measurement of interest of athletes and the sports community for the field of anti-doping.

Website

The website of CITA Department for Anti-Doping has been actively used for the purpose of continuous information and education of all participants in sport. Athletes and all interested parties in the world of sports have access to a List of registered medicines in Croatia containing some of the substances included in the Prohibited list. This List is continuously updated on a monthly base in cooperation with the Agency for Medicinal Products and Medical Devices. We also provided

support for all other segments of anti-doping activities (education, therapeutic use exemptions, legislation, brochures, etc.) through the website. On the website there is a WADA video video explaining the doping control procedure with Croatian translation.

Platforms for secure transmission of confidential data

During 2018, secure systems for the transmission of confidential data were implemented on two separate domains. These are systems for applying for therapeutic use exemptions and for reporting doping-related suspicions, as well as an e-mail server with the highest level of encryption where the applications and doping reports sent from the above-mentioned domains are received. Given that these are sensitive areas where it is particularly necessary to protect the received data (personal data, medical information, data which is confidential by its very nature and which needs to be protected from unauthorized access), all systems are decentralized and mutually independent platforms, as well as two domains on two different servers so that they function independently of each other, as the activities associated with these applications are procedurally separated as well. Steps were taken on both domains on the server and user side, in accordance with technical specifications, which allow for complete protection of privacy, end-to-end data encryption and safety of data of therapeutic use exemptions applicants and persons reporting suspicions of doping.

- TUE form for the application of therapeutic exemptions on the antidoping-hzta domain

We plan to continue to use this form 2019, since in this way, with high standards of protection at the server and user side, the possibility of unauthorized access to personal and confidential data related to therapeutic use exemptions is minimized.

- Website for safely reporting suspicions of doping

We plan to continue to use this website in 2019 (domain called “Speak up”), since it allows the collection and processing of data related to doping suspicions, with high standards of protection at the server and user side, and thus minimizes the possibility of unauthorized access to such data.

Secure email system

During 2018, an end-to-end encryption system was implemented on an independent e-mail server Protonmail. So far, 2048 bit encryption has been implemented, since all computers used in the system do not have the necessary computing power to support 4096 bit encryption. In this way, the

communication system between all e-mail addresses/accounts in this system includes the highest possible level of security and protection from unauthorized access to data.

In 2019, we plan to continue the work in accordance with the established principles of protection and safety, since this type of work is closely linked to the overall anti-doping issue. With the synergy of three decentralized systems, we have created one, user-friendly, comprehensive tool for an effective fight against doping, and we have also ensured a high standard of protection of both personal data (anonymity) and received information.

Andreas Krieger educational video

The Croatian Institute for Toxicology and Anti-Doping, in collaboration with the German National Anti-Doping Agency, prepared a video story in the Croatian language about Andreas Krieger, which deals with the issue of institutionalized doping, and is a powerful educational tool for the purpose of deterrence from doping. The link to that video is posted on our website, and we can also use the video in our educational activities.

Newsletter

During the reporting period, regular anti-doping newsletters were sent, namely two (2) newsletters per month. The purpose of the planned newsletter is to intensify communication with interested parties in the sports community in Croatia. With regard to the implementation of the newsletter, invitations were sent to all national sports federations, the Croatian Olympic Committee, the media outlets and the Ministry of Health, the Ministry of Science and Education, the Central State Office for Sports and other persons with whom communication on anti-doping was recorded. A system for the subscription to the newsletter is also posted on the website. The newsletter also enables us to analyse the effectiveness of its implementation in terms of an increase in the number of visits to the website through the newsletter, and indirectly also the effect on the communication of anti-doping message or doping prevention.

Play True Day

Based on experience from Erasmus + and the prePLAY projects in pursuit of the intense anti-doping promotion of the Play True Day in 2016, and implementation of these activities within the 2017 national program, we have continued to celebrate the Play True Day in 2018. In this regard, we participated in the Sportske novosti cross race. On April 21, 2018 at the Bunde Lake in Zagreb

the traditional 35th Sportske novosti cross race took place. More than 3,000 primary and secondary school students from all over Croatia, around 1,000 students and 100 citizens competed in the race. Many Croatian athletes, who are members of national teams, mostly in athletics, also participated in the cross race. About a hundred participants in the race visited our stands with the intent of learning about clean sport, sport without doping.

Public relations

The media play an extremely important role in the transmission of anti-doping information. Our cooperation with the Croatian media is good. After each press release, we reply to journalists' inquiries regarding the published case, to the extent determined by the Articles of the Code. We have established special cooperation with Sportska televizija, and have made several educational videos with a purpose of anti-doping awareness. We also made anti-doping messages directed at footballers of the Croatian First Football League.

4. INTERNATIONAL COOPERATION

INTERNATIONAL ACTIVITIES AND INTERNATIONAL COOPERATION

During 2018, CITA has been working to strengthen its cooperation with scientific and health institutions dealing with doping in sport.

In 2018, CITA representatives participated in the following meetings as part of international cooperation:

- Anti-doping seminar "Prevention of doping in professional and amateur sport through education and research", January 24 and 25, 2018 in Sofia, Bulgaria, organized by the Council of Europe, the Ministry of Youth and Sports of Bulgaria and Bulgarian National Anti-Doping Organization. The main topic of the meeting was coordination of the common EU standpoint regarding the process of revision of the World Anti-Doping Code.
- Meeting of the Working group of the Council of Europe for sports, February 19, 2018 Brussels. CAHAMA established a subgroup whose task was to examine the justification for a substantial budget increase for the proposed four-year WADA's work plan. A detailed report by the working subgroup to European representatives will facilitate further discussions and creation of the draft mandate regarding the four-year budget and WADA's work plan.
- 41st meeting of the Ad Hoc European Committee for WADA (CAHAMA), February 27, 2018 Warsaw (Poland). At the meeting, first proposals proposals for the amendments to the Code were presented, as well as proposals for additional strategies for increasing WADA's budget.
- The meeting of Council of Europe's experts for the revision of the Anti-Doping Code, March 6, 2018 Brussels. The main topics were the protection of athletes' privacy, the creation of a binding procedure for the public disclosure of sanctions, the creation of a document on the protection of whistle-blowers and a clearer definition of athletes' rights.
- iNADO annual symposium in Lausanne (Switzerland), March 20, 2018. The experiences of participants in the research on the compliance of anti-doping organizations with the Articles of the World Anti-Doping Code was analysed at the symposium. The adequacy of

the Code contents has been analysed with regard to the changed circumstances in the world of anti-doping. In this light, a presentation by Mike Earl, the president of the World Rugby organization stood out. He pointed out the controversy of the presence of so-called social drugs (cocaine, marijuana) included in the Prohibited list. High quality presentations were delivered on preparing for the compliance audit and good communication of anti-doping organizations with the media. During the symposium, the need for greater participation of athletes in the development of anti-doping policies was emphasized. The most interesting innovations in the field of anti-doping were presented, including the development of new testing kits in cooperation with USADA and the US Baseball League. A Russian smart phone application received the best innovation title - it allows athletes to quickly check whether a substance is included in the List and its characteristics.

- WADA annual symposium in Lausanne (Switzerland), March 21 - 23, 2018 The main topics at the symposium were the need for better WADA's funding in view of the ambitious and comprehensive four-year plan, as well as the need to tackle the doping problem in Russia more quickly, the Articles of the new International Standard on Compliance with the Code and the Code revision. From the presentation on the assessment of actions taken to harmonize the work of anti-doping organizations with the Code, it is evident CITA achieved an excellent result as it is among the 26 of the 307 anti-doping organizations, which are fully compliant with the Articles of the Code. CITA is also one of 16 national organizations in the world, i.e. one of 11 anti-doping organizations in Europe that are fully compliant with the Articles of the Code. A pressing problem, namely the lack of suitable test kits after Berlinger's withdrawal from production, was discussed. In the area of investigation, Director of the WADA Research Department submitted a one-year practice report and reported that they are currently working on 214 cases. The WADA Education Manager spoke about the application of new digital technologies in education and among others emphasized the translation of WADA ALPHA program into Croatian language. The workshop on storage and reanalysis of samples taken during anti-doping controls was also interesting.
- "Team Whereabouts" meeting organized by UEFA, April 11, 2018 in Nyon, Switzerland. Conclusions of the meeting: It is justifiable to collect data for a team in case of launching an efficient and effective out-of-competition testing, if there is a need for anti-doping

organizations to share the team's whereabouts under their jurisdiction, and the necessity for modules for locating teams in ADAMS Next Gen exists.

- Symposium of the Council of Europe Monitoring Group in co-operation with the Cypriot Anti-Doping Body was held on April 16, 2018 in Larnaca (Cyprus) on the legal aspects of the two recommendations of the Monitoring Group, namely the Recommendation on ensuring the independence of the Hearing panel and promotion of fairer trials, and the Recommendation for the exchange of information between public bodies and anti-doping organizations.
- 48th meeting of the Monitoring group of the Council of Europe (T-DO), Strasbourg, May 2 and 3, 2018. At the Monitoring Group meeting, elections were held for the next mandate period. Michael Petrou, MD from Cyprus was elected president of the Monitoring Group, The deputy was not elected since the only candidate dropped his candidature, and Lars Mortsiefer, MD from Germany was elected president of the expert group for legal issues. Lucienne Attard, MD from Malta was elected president of the expert group for education, Detlef Thieme, MD from Germany was elected president of the expert group for science, and Valentina Alexandrescu from Romania was elected president of the expert group for compliance. A proposal to amend the Group's procedures to allow imposition of sanctions on a particular member state of the Council of Europe in the event of non-compliance was accepted.
- 42nd meeting of the Ad Hoc European Committee for WADA (CAHAMA), May 3 and 4, 2018 Strasbourg. At the CAHAMA meeting, a proposal was made for a mandate for European representatives at meetings of WADA's Executive Committee and Founding Committee, to be held in Montreal, May 16 and 17 2018.
- The first global forum for athletes organized by the Canadian Olympic Committee in collaboration with the Canadian National Anti-Doping Organization and WADA, June 3 - 5, 2018 in Calgary. A proposal for the Charter of Athletes' Rights, which will form an integral part of the 2021 Code, was presented at the forum.
- Trilateral meeting of anti-doping organizations from Slovenia, Austria and Croatia, Opatija, June 4, 2018. At the meeting of the Heads of national anti-doping organizations of Austria, Croatia and Slovenia, the most important issues discussed were impact of GDPR (General Data Protection Regulation) on the daily activities of these organizations, the proposal for

- the 2019 Prohibited list, the agreement between WADA and the Foundation for Scientific Research of Quebec, and the agreements on cooperation among anti-doping organizations.
- International Conference "Just Sport" organized by the Rijeka Sports Federation, June 5 and 6, Opatija. At the conference one of the most important topics was the synergy between public institutions and sports associations in preventing doping in recreational environments with the question of whether doping in fitness centres (or among recreational athletes) is a problem of "sport" or "public health".
 - 43rd meeting of the Ad Hoc European Committee for WADA (CAHAMA), September 11, 2018 Brussels. At the CAHAMA meeting, a mandate was determined for European representatives at the meeting of WADA's Executive Committee and Founding Committee, held on September 20, 2018 in Seychelles. The Council of Europe strongly supports the work of the Compliance Review Committee (CRC) and accepts the report of the President of the Committee Mr. Jonathan Taylor.
 - 44th meeting of the Ad Hoc European Committee for WADA (CAHAMA), October 29 and 30, 2018 Strasbourg. At a meeting of CAHAMA, after a detailed and extensive exchange of views between representatives of European countries and representatives of WADA, a mandate was determined for European representatives at the meeting of WADA's Executive Committee and Founding Committee, to be held on November 14 and 15, 2018 in Baku, Azerbaijan.
 - 49th meeting of the Monitoring group of the Council of Europe (T-DO), Strasbourg, October 30 and 31, 2018. At the meeting of the Monitoring Group, inter alia, a mid-term work strategy of the the Monitoring Group and a revision of the Council of Europe's Anti-Doping Convention were discussed. One of the most important topics was the implementation of recommendations on the operational independence of national anti-doping organizations. Reports on co-operation with external partners, situation in individual countries and reports on monitoring visits in certain countries were submitted.
 - UEFA 2018 Anti-Doping Symposium, London, November 22 and 23, 2018. The topics at the symposium were the past, the present and the future of the World Anti-Doping Code, the value and location of retesting samples, the location of the International Anti-Doping Agency and the Court of Arbitration for Sport as the first instance entity for the settlement of anti-doping disputes, team whereabouts, compliance and non-compliance before and

after the Russian scandal, the prevalence of doping and intelligent testing, and harmonization of the Code with athletes' rights and effective anti-doping measures.

- On November 25, 2018, an initial meeting of the Central European Anti-Doping Organizations (CEADO) was held in Seibersdorf. The meeting was attended by representatives from Austria, Slovakia, Hungary, Slovenia, Croatia and Serbia. A draft of the Statute was discussed, and it was agreed to hold the constitutive meeting in Budapest at the beginning 2019.
- November 26 and 26, 2018. The Seibersdorf Laboratory organized an annual meeting and the 11th Anti-Doping Workshop called "Code Compliance". The topic of the meeting was the compliance of different stakeholders and other members of the anti-doping movement with the Code of the World Anti-Doping Agency. The presentations were delivered by representatives of WADA, iNADO, international sports federations, national anti-doping organizations and anti-doping laboratories certified by WADA, as well as legal experts participating in the work of the Court of Arbitration for Sport (CAS).

Ms. Snježana Karlo, Head of the CITA Testing section, was appointed, on February 1, 2018 by the Central State Office for Sports of the Republic of Croatia, as the anti-doping expert and a member of the Croatian team for participation in preparatory activities and activities during the presidency of the Republic of Croatia of the Council of Europe in the field of doping in sport, and as a representative of the Republic of Croatia she participates in the work of the Working group of the Council of Europe for sport.

Ms. Ana Dobrila Bošnjak, head of the CITA of Medicine and Science section, was appointed as one of the leaders of the Croatian delegation by the Ad Hoc European Committee for WADA (CAHAMA).

AGREEMENT ON COOPERATION

The Croatian Institute for Toxicology and Anti-Doping (CITA) and the Austrian Anti-Doping Organization (NADA) have maintained good cooperation in the field of anti-doping in sport for years.

This long-term cooperation has now been formalized by means of an Agreement on Cooperation in the Fight Against Doping in Sport with a view to further develop and strengthen their mutual relations and cooperation. The Agreement was signed on May 8, 2018. The Signatories shall cooperate on a business and technical plan in order to establish good relationships in the field of exchange of experience and knowledge in the fight against doping in sport, to participate in mutually interesting projects, professional training and other activities in accordance with the relevant regulations.

In accordance with their mutual agreement, they will exchange knowledge and experience related to: arranging, organizing and conducting doping controls in sports competitions; arranging, organizing and conducting doping controls out of sports competitions; training of qualified persons for conducting doping controls; legal frameworks and international regulations for the fight against doping in sport; measures to reduce doping in sport and its long-term elimination; therapeutic use exemptions; prohibited substances and methods; doping control of animals; the education of sport participants and all other forms of anti-doping in sport.

5. THERAPEUTIC USE EXEMPTIONS

During the reporting period, the work of the Therapeutic Use Exemption Committee was performed in accordance with the International Standard for Therapeutic Use Exemptions and the Therapeutic Use Exemption Guidelines.

During 2018, we received twenty-four (24) applications for therapeutic use exemptions (TUE). Out of these, in sixteen (16) cases the criteria for a consideration at the session of the TUE Committee were met, while in eight (8) of the cases these criteria were not met. Sixteen (16) sessions of the TUE Committee were held during the same period and a total of sixteen (16) applications for therapeutic use exemptions were granted, five (5) of which prospective and eleven (11) retrograde.

Table with granted Therapeutic Use Exemptions

active substance	diagnosis	TUE type
dexamethasone	lumbago with sciatica	RA
methylprednisolone, dexamethasone	urticaria	RA
dexamethasone	vestibular positional migraine	RA
dexamethasone	lumbago with sciatica	RA
dexamethasone	urticaria	RA
vilanterol	allergic asthma	A
prednisone	chronic rhinosinusitis	A
prednisone	IgA nephropathy, chronic kidney disease gr. III	RA
insulin aspart	diabetes	A
dexamethasone	back pain	RA
Somatropine	growth hormone deficiency	A
dexamethasone	lumboschialgia	RA
dexamethasone	lumboschialgia	RA
prednisone	IgA nephropathy, chronic kidney disease gr. III	RA
dexamethasone	lumbago with sciatica	RA
vilanterol	allergic asthma	A

Out of the eight applications for TUE in which the criteria for the consideration at the session of TUE Committee were not met, in one case there was not enough medical documentation, in two cases the TUE application was not timely submitted, and in five cases there was no need to grant a TUE given the medication and its way of administration (local).

Table with unfounded applications for Therapeutic Use Exemptions

active substance	diagnosis	reason
dexamethasone	lumbago with sciatica	medical documentation not submitted
triamcinolone	painful shoulder syndrome	local drug administration
methylprednisolone	allergic hives	application was not timely submitted
prednisone	tubotympanic catarrh	application was not timely submitted
budesonide, formoterol	bronchial asthma	local drug administration
oxymetazoline	rhinitis	local drug administration
oxymetazoline	rhinitis	local drug administration
dexamethasone	rhinitis	local drug administration

All decisions of the TUE Committee from the reporting period have been entered into the ADAMS system and were thus made available to WADA and other authorized organizations. In this way, the transparency of the procedure for issuing therapeutic use exemptions and the work of the TUE Committee is ensured.

In the view of the General Data Protection Regulation (GDPR), which entered into force on May 25, 2018, we have also improved the safety of the system for therapeutic use exemptions applications. Based on this, the updated guidelines on the application for therapeutic use exemptions are available on the website. For the purpose of secure submission of TUE applications, a system for secure submission of TUE applications by electronic means was implemented, i.e. through a “secure TUE portal”, thus protecting the personal and confidential data of persons submitting this application to the maximum extent possible. In accordance with the updated security measures for the protection of such data, additional ways of submitting applications for TUE are available: by registered mail and/or personal submission at the Institute for Toxicology and Anti-Doping.

6. MEDICINE AND SCIENCE

In 2018, the development of a method for the detection of erythropoietin and its derivatives, which are difficult to detect using the standard methods, was continued. The benefits of this approach could include faster and cheaper testing of the unauthorized use of erythropoietin derivatives. As a result of the research, magazine Biosystems quoted in CC, SCI and Chemical Abstracts published a scientific paper:

Štambuk N, Konjevoda P, Turčić P, Kövér K, Novak Kujundžić R, Manojlović Z, Gabričević M. Genetic coding algorithm for sense and antisense peptide interactions. Biosystems. 164 (2018), 199-216 doi:10.1016/j.biosystems.2017.10.009

The counselling centre continued to provide services to athletes in competitive and recreational sports, medical staff in sports federations and clubs, occupational medicine and sports medicine specialists, physicians of other specialities involved in treating athletes, sports officials and other persons related to the problems of use of drugs in sports. The services of the counselling centre include:

- counselling about doping in sport,
- counselling regarding pharmacodynamic and pharmacokinetic properties of a drug in relation to sports activity,
- rationalization of an existing pharmacotherapy,
- dealing with side effects of drugs,
- dealing with resistance to drug therapy, counselling about drug hypersensitivity,
- individualization of therapy with the possible CYP phenotype and genotype determination,
- dealing with irrational polypharmacy,
- recommendation of diagnostic procedures in the sense of re-evaluation of the existing diagnosis
- consultative cooperation with physicians of other profiles regarding pharmacotherapy of athletes.

In 2018, special emphasis in the work of the counselling centre was on informing users about the pharmacodynamic effects, the purpose and the dangers of taking dietary supplements.

In 2018, numerous consultations were carried out through the work of The Counselling Centre for Anti-Doping and Rational Pharmacotherapy in Sports and sixty-three (63) inquiries by sports physicians, athletes and trainers concerning the use of drugs and dietary supplements were answered. Most of the questions were related to the safety of taking various dietary supplements. The questions about drugs included taking drugs such as antibiotics, inhaled glucocorticoids, thyroid hormone replacement drugs, progestogens, analgesics, antihistamines, antihypertensives, proton pump inhibitors, antiepileptics, antidepressants, local decongestants, but also anabolic steroids, glucocorticoids, non-specific stimuli and cannabis. Several inquiries about substances contained in the Prohibited list (OG 116/13) were received from the Customs office.

In April 2018, CITA Department for Anti-Doping organized two (2) postgraduate courses named “Doping in sport” in cooperation with the the Croatian Medical Chamber and the Faculty of Medicine of the University of Zagreb. The courses were held at the CITA counselling for anti-doping and rational pharmacotherapy. The lectures as part of the course were held by the physicians of the CITA Department for Anti-Doping and teachers at the School of Medicine of the University of Zagreb. The participants were doctors of medicine. The course was awarded with eight points for listeners and ten points for lecturers by the Croatian Medical Chamber.

CITA Science council

At the end of 2017, the CITA Science council was established as the consultative body of the CITA Department for Anti-Doping. Members of the council are prominent experts from medical and other fields who show interest in the field of anti-doping in sport.

At the first constitutive session of the CITA Science council in January 2018, the president, deputy and secretary of the council were elected. It was concluded there is a need for evaluation of substances that are included in the List or should be included in the List. It was suggested, a mandatory criterion for inclusion in the List in the new Code should be the potential of a substance

to improve a sporting performance, as proposed in the first draft of the 2015 Code. This was, as the most important amendment to the Code, proposed to WADA's working group for the revision of the 2015 Code.

In the sense of the evaluation of ergogenic properties, the council believes it is necessary to clarify the meaning of point b) of Article 25 of the UNESCO Convention. Through the Central State Office for Sports of the Republic of Croatia, a request has been sent to the UNESCO Anti-Doping Convention for the clarification of Article 25 of the Convention.

Different ways of determining clinical efficacy and ergogenic properties of substances included in the Prohibited list were considered, as well as those not included in the List, but showing ergogenic potential, and methods of analysis, such as meta-analysis of published papers, were proposed. It was proposed to determine the methodology of the degree of effectiveness and to consider appropriate clinical research for substances included in the List for which the ergogenic potential is not clearly determined, and substances not included in the List, but for which the council believes have ergogenic potential, in order to enable the scientific determination of ergogenic properties of the substances which have an ergogenic potential determined in vitro and in preclinical studies.

7. PREMISES AND EQUIPMENT MAINTENANCE

In 2018, the necessary IT equipment was procured.

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