

MINUTES

Health, Medical & Research Committee Meeting 13 November 2024 (9am-12pm EST) Hybrid meeting: videoconference and Montreal, Canada

Participants:

Prof. Lars Engebretsen, Chair Prof. Xavier Bigard Prof. Francesco Botré (in-person) Dr. Lenka Dienstbach-Wech Prof. Yannis Pitsiladis Dr. Malav Shroff Prof. Christian Strasburger Dr. Audrey Kinahan (ex-officio member)

Apologies

Prof. Takao Akama (recommendations sent by email, on 8 November 2024) Prof. Wayne Derman (recommendations sent by email, on 11 November 2024) Dr. Matthew Fedoruk (recommendations sent by email, on 5 November 2024)) Prof. Andrew McLachlan Dr. Bruno Le Bizec (ex-officio member)

Absences

Prof. Milica Vukasinovic-Vesic Prof. Odile Cohen-Haguenauer (ex-officio member) Dr. Susan White (ex-officio member)

WADA staff:

Dr Léonie Egli Dr Simon Fortier (in-person) Dr. Irene Mazzoni Dr Luciana Meirotti (in-person) Prof. Olivier Rabin (in-person)



Meeting summary:

<u>Item 1:</u> Recommendations on 33 full applications received during the 2024 cycle 2 call for scientific research grants.

- Disclosure of conflicts of interest.
- Discussion of 33 full applications (FA), selected out of the 55 expressions of interest (EOI) submitted at the 2024 cycle 2 call for grants. Each full application was reviewed by three external experts. All full applications and the respective reviews were shared with the HMRC members ahead of the meeting.
- Details of the full applications, HMRC recommendations and main comments are shown in Annex A.
- Due to declared conflict of interest, Prof. Francesco Botré left the room during the discussions of the proposals 242A12JFN, 242B04CM and 242C12EI.

Item 2: Recommendation on one EOI received during the 2025 cycle 1 call for scientific research grants.

 EOI 251C02CvdP, Principal Investigator: Dr. Chris van der Poel. Project title: Investigating the Pharmacokinetics of Steroid Hormones in Transgender Animal Models: Implications for muscle mass and athletic performance. Recommendation: do not invite full application because as presented, the project is out of WADA's scope of research because eligibility criteria are established by federations and not WADA.

Closing of meeting.

ewada

Annex A

	Full application							HMRC meeting		
UniqueID	Admin Code	Name (PI)	Project title	Duration	Requested budget (US\$)	Recommendation	Recommended budget (US\$)	Main comments		
u2612-app4233	242B05SV	Sven Voss	Effect of exercise induced proteinuria and hypoxia on the analysis	1 year	27,700.00	Fund	27,700.00	The treadmill exercise protocol should be		
			of rEPO.					validated to demonstrate that it leads to proteinuria		
u3120-app4154	242C03WCW0	William Chih-Wei Chang	Investigation of the applicability of dried blood spots for the analysis of glucocorticoids	2 years	120,000.00	Fund	120,000.00	Suggest adjusting the oral dose of prednisolone to the maximum therapeutic dose (60 mg).		
u1616-app4277	242C12EI	Eduard Isenmann	Performance Enhancement and Energy Metabolism Modulation by Diosgenin in Endurance Athletes (242C12EI)	1 year	54,000.00	Fund	54,000.00	Recommendation to increase the washout period.		
u3126-app4186	242C05PB	Phillip Bellinger	The effect of formoterol on blood, urine and muscle metabolism, prolonged endurance performance and sprinting ability in trained endurance athletes	2 years	212,360.40	Fund conditional	93,000.00	Focus on the performance enhancement experiments only (drop the mechanistic characterization) and reduce budget. Enroll subjects of one gender only (women preferentially).		
u631-app4266	242B02CR	Christian Reichel	Analysis and evaluation of black market nasal sprays containing peptides and proteins	1 year	55,000.00	Fund conditional	45,000.00	Reduce budget.		
u3112-app4181	242A09TL	Tobias Langer	Evaluation of analyte stability and uniformity of dried blood spots collected with automatic Tasso M20 devices for antidoping applications	1 year	60,000.00	Fund	60,000.00	Suggestion to contact the manufacturer to obtain additional data on stability and homogenity of the spots.		
u2305-app4232	242C06DK	Dimitris Kletsas	Investigation of the Metabolic Fate of Nandrolone's Prohormone 19-Nor-DHEA.	1 year	78,941.00	Fund	78,941.00	Suggestion to increase the sampling phase to a minimum of one month.		
u2271-app4293	242A12JFN	Jean-Francois Naud	Carbon stable isotope analysis of 7-Keto-DHEA doping targeting both glucuronated and sulfoconjugated metabolites	1 year	50,260.00	Fund	50,260.00	Suggestion you to use samples with different concentration to establish sensivity levels.		
u3067-app4257	242C10ND	Nenad Dikic	MISUSE OF BENZODIAZEPINES IN FREEDIVING COMPETITIONS	1 year	39,000.00	Fund	39,000.00			
u2112-app4194	242B04CM	Christer Malm	Autologous blood doping biomarker: Single-cell fluid properties, Al Morphology and Extracellular vesicles.	2 years	232,962.00	Do not fund		Suggestion to provide better preliminary data and include <i>in vivo</i> experiment in your proposal, if possible, and re-submit.		
u2596-app4172	242D01CW	Chao Wen	Investigating the Metabolic Profiling of Endogenous Anabolic Androgenic Steroids in the Chinese Population	2 years	101,266.00	Do not fund		Provide power analysis and adjust sample size accordingly; provide more information on selection criteria of the subjects. Re-apply.		
u3077-app4168	242C11MT	Massiré Traoré	GDF5-based Administration effects on Muscular performancE (GAME)	2 years	116,000.00	Do not fund		Present human data, if available. Justify why the aerobic capacity would be tested, as GDF5 seems to act mainly on muscle strength. Remove development of an ELISA detection mehtod. Re- apply.		
u1996-app4163	242F03GC	Gustavo Cavalcanti	Development of an LC-HRMS Workflow Using One-Class Classification Models for Detecting Unknowns in Doping Analysis	2 years	124,000.00	Do not fund		Low applicability to anti-doping testing. Number of samples is too small given the impact of confounding factors.		
u3091-app4202	242D03OS	Olivier Salamin	Investigation of serum and urine sulfated steroids as biomarkers for detecting testosterone gel administration in healthy women	1 year	70,000.00	Fund	70,000.00			
u2703-app4191	242F05CG	Costas Georgakopoulos	Artificial Intelligence Assisted Processing of PAGE Electropherograms for the Detection of Erythropoietin and EPO- receptor Agonists in WADA Accredited Laboratories	2 years	98,100.00	Fund conditional	98,100.00	Collaborate with additional WADA-accredited labs to have more diverse gels.		
u3091-app4176	242D02OS	Olivier Salamin	Effects of testosterone administration and menstrual cycle phases on endocrine profiles in healthy women	1 year	66,000.00	Do not fund		The stability of the endocrine markers at -20°C is not known, threfore these samples can not be used for research. Re-apply if stability data at - 20°C is provided.		
u2271-app4292	242E01JFN	Jean-Francois Naud	Using proteins as markers for anabolic steroid abuse: a new perspective in doping control?	1 year	53,866.00	Do not fund		Exploratory study and no direct application is foreseen		
u3133-app4240	242C07EC	Erika Castrignano'	Investigation into potential abuse of hexahydrocannabinol in sport drug testing: from a pharmacokinetic study to retrospective analysis of THC cases	1 year	154,519.00	Do not fund		Project plan lacks details, especially for the human interventions. Previous work has been published on the detection of HHC in serum, oral fluid and urine		
u195-app4179	242D05RV	Rosa Ventura	Improving the Detection of Endogenous Anabolic Steroids misuse by measuring endogenous Sulfate metabolites 3 (IDEASS 3)	2 years	258,938.00	Do not fund		Results from previous work should be reviewed by experts and the possibility of implementing the new approach assessed before additional funds are committed.		
u3130-app4170	242C04RA	Rodrigo Aguilera	Toxicological Characteristics of Anabolic-Androgenic Steroid Abuse in Community-Dwelling Gym Users	1 year	153,190.00	Do not fund		More focused study recommended. Consider less volunteers, fewer substances and more urine samples in a longitudinal study. Re-apply.		
u786-app4205	242E06NL	Nicolas Leuenberger	Investigate the impact of DBS collection method on RNA biomarkers	1 year	70,800.00	Do not fund		Need of a thorough review of the validity of these RNA biomarkers before funding other project on that topic. Consider additional biomarkers for any future application.		
u3110-app4190	242C01DMC	Danielle McCartney	Factors influencing urinary cannabinoid concentrations in adults	2 years	99,224.00	Do not fund		Focus on restricted population and substances, WADA to provide guidance on study parameters. Re-apply.		
u1381-app4290	242A11HMG	Henrique Marcelo Gualba	Therapeutical doses vs Contaminated supplements administration: Comparative study using VAMS and urine matrices for diuretics and stimulants for antidoping purposes.	2 years	110,000.00	Do not fund		Focus on therapeutic doses of stimulants and differentiation of in-vs. out of competition intake (risk of contamination should not be the focus). Exclude ritalinic acid (studied in another WADA- funded project). Provide enough details about the administration studies. Re-apply.		

Annex A (Cont.)

u1381-app4246	242A05HM	Henrique Marcelo Gualb	e Comprehensive Initial Testing Procedure based on on-line Dilute and Shoot + SPE LC-HRMS	1 year	75,000.00 Do not fund		The added value of the proposed procedure over the current methods is unclear. Preliminary data would be helpful.
u3088-app4160	242B01SS	seiichi SAKAMOTO	Comprehensive screening of higenamine and/or coclaurine- containing crude drugs from traditional Japanese medicines, Kampo medicines to avoid "unintentional doping"	3 years	234,000.00 Do not fund		Low interest due to the low prevalence of Chinese herbal medicine (including Higenamine) in Japan.
u3014-app4180	242E03KC	Kyle Cromer	Advancing non-invasive detection of doping via in vivo genome editing	2 years	253,501.00 Fund conditional	150,000.00	Focus on first aim, reduce budget.
u2299-app4185	242A06AM	Alessandro Musenga	Evaluation of supercritical fluid chromatography coupled to mass spectrometry for the chiral analysis of stereoisomeric doping agents.	1 year	80,000.00 Do not fund		
u75-app4201	242A01MP	Michael Polet	Alkylamines and other small stimulants: overcoming analytical issues, enabling reliably semi-quantification.	1 year	47,061.67 Do not fund		
u3037-app4251	242F04LH	Loïc Hoscheit	Developing a systemic and automated approach to detecting outliers in high-level sports	2 years	150,000.00 Do not fund		
u2021-app4193	242D07FP	Federico Ponzetto	Evaluating alcohol effects on Blood Steroid Profile by simultaneous measurement of EAAS doping and alcohol consumption markers via LC-MS	2 years	66,000.00 Fund	66,000.00	
u3090-app4167	242A02KS	KAPENDRA SAHU	Identification & Investigation of Nandrolone and Testosterone marketed formulations with endogenous isotope ratio in the India: Implications to Anti-Doping	2 years	94,413.00 Do not fund		
u3132-app4164	242E04AM	Alexandre MARCHAND	Survey of gene doping and sample substitution/falsification : validation of detection methods directly applicable in antidoping laboratories.	3 years	135,000.00 Do not fund		
u3135-app4264	242C08MA	Marina Amaral Alves	Comparative study of the phase I and II metabolism of oxandrolone using in vitro and in vivo metabolic prediction models	2 years	84,000.00 Do not fund		
					TOTAL (US\$)	952,001.00	