



2013

Anti-Doping

Testing Figures

Laboratory Report

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Terms and Abbreviations

IC	In-Competition
OOO	Out-of-Competition
Sample	Any biological material collected for the purposes of <i>Doping Control</i> *
AAF	Adverse Analytical Finding
ATF	Atypical Finding
GC/C/IRMS	Gas Chromatograph/Carbon/Isotope Ratio Mass Spectrometer (e.g."IRMS")
EPO	Erythropoetins
hGH	hGH Isoform Differential Immunoassays
HBT	Homologous Blood Transfusion
HBOCs	Haemoglobin Based Oxygen Carriers
IOC	International Olympic Committee
AIMS	Alliance of Independent Members of SportAccord
NADO	National Anti-Doping Organization
RADO	Regional Anti-Doping Organization
NOC	National Olympic Committee
IF	International Federation
NF	National Federation
TA	Testing Authority
SCA	Sample Collection Authority
ADAMS	Anti-Doping Administration and Management System
ABP	Athlete Biological Passport
IPC	International Paralympic Committee**

* biological material limited to urine and blood in this report

** limited to sport/disciplines under the auspices of the IPC (others are compiled under the category "Sports for Athletes with an Impairment")

Table 1: Total Samples Analyzed (All Sports)*

A Samples Analyzed

Sport	Analyzed	AAFs ¹	(%)	ATFs ²	(%)	Total Findings ³	(%)
Olympic Sports	176,502	1,710	0.97%	1,716	0.97%	3,426	1.94%
Non-Olympic Sports	31,011	830	2.68%	322	1.04%	1,152	3.71%
Non-ADAMS Data	62,365	989	1.59%	395	0.63%	1,384	2.22%
TOTAL	269,878	3,529	1.31%	2,433	0.90%	5,962	2.21%

¹ **The Adverse Analytical Findings (AAF) in this report are not to be confused with adjudicated or sanctioned Anti-Doping Rule Violations (ADRV).** "Adverse Analytical Finding" is defined in the World Anti-Doping Code as "a report from a laboratory or other WADA - approved entity that, consistent with the *International Standard for Laboratories* and related Technical Documents, identifies in a *Sample* the presence of a *Prohibited Substance* or its *Metabolites* or *Markers* (including elevated quantities of endogenous substances) or evidence of the *Use of a Prohibited Method*." These figures may not be identical to sanctioned cases, as the figures given in this report may contain findings that underwent the Therapeutic Use Exemption (TUE) approval process.

² **The Atypical Findings (ATF) in this report are not to be confused with adjudicated or sanctioned Anti-Doping Rule Violations (ADRV).** "Atypical Finding" is defined in the World Anti-Doping Code as "a report from a laboratory or other WADA-approved entity which requires further investigation as provided by the *International Standard for Laboratories* or related Technical Documents prior to the determination of an *Adverse Analytical Finding*". *Atypical Findings* may correspond to multiple measurements performed on the same *Athlete*, such as in cases of longitudinal studies on testosterone.

³ Includes *Adverse Analytical Findings* and *Atypical Findings*

* These figures do not include blood samples taken for the ABP. Blood samples taken for the ABP can be found in the report "2013 Anti-Doping Testing Figures - Athlete Biological Passport (ABP) Report - Blood Analysis".

2013 Anti-Doping Testing Figures
Samples Analyzed and Reported by Accredited Laboratories in ADAMS

Table 2: Comparison of Years 2009 to 2013 - Olympic and Non-Olympic Figures

	2009 A Samples Analyzed	2010 A Samples Analyzed	2011 A Samples Analyzed	2012 A Samples Analyzed	2013 A Samples Analyzed	2013 vs 2012 A Samples Analyzed
Olympic Sports*	187,029	180,567	167,820	184,955	176,502	-4.6%
Non-Olympic Sports**	90,899	77,700	75,373	82,690	93,376	12.9%
TOTAL	277,928	258,267	243,193	267,645	269,878	0.8%

	2009 AAFs ^{1,2}	2010 AAFs ^{1,2}	2011 AAFs ^{1,2}	2012 AAFs ^{1,2}	2013 AAFs ^{1,2}	AAFs ³ 2013 vs 2012
Olympic Sports*	1,674	1,617	1,762	1,831	1,710	-6.6%
Non-Olympic Sports**	1,417	1,173	1,123	1,359	1,819	33.8%
TOTAL	3,091	2,790	2,885	3,190	3,529	10.6%

	2009		2010		2011		2012		2013		Δ% Total Findings ³ 2013 vs 2012
	% AAFs ¹	% Total Findings ³	% AAFs ¹	% Total Findings ³	% AAFs ¹	% Total Findings ³	% AAFs ¹	% Total Findings ³	% AAFs ¹	% Total Findings ³	
Olympic Sports*	0.90	1.98	0.90	1.78	1.05	1.91	0.99	1.56	0.97	1.94	0.38
Non-Olympic Sports**	1.56	2.10	1.51	2.07	1.49	2.19	1.64	2.21	1.95	2.72	0.51
Overall	1.11	2.02	1.08	1.87	1.19	2.00	1.19	1.76	1.31	2.21	0.45

* Olympic Sport data may include tests conducted in non-Olympic disciplines of the sport

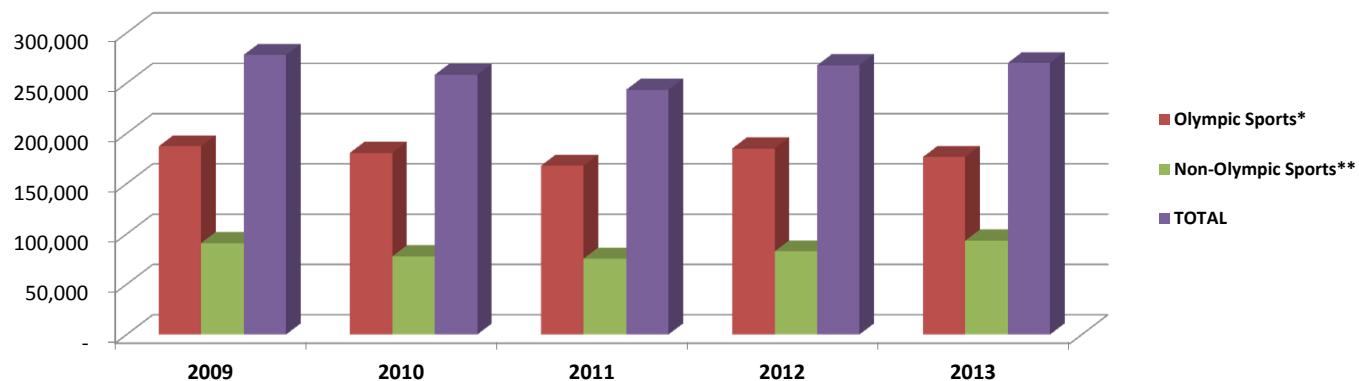
** includes non-Olympic sports data and non-ADAMS data (Table A)

¹ The Adverse Analytical Findings (AAFs) in this report are not to be confused with adjudicated or sanctioned Anti-Doping Rule Violations (ADRVs). These figures may not be identical to sanctioned cases, as the figures given in this report may contain findings that underwent the Therapeutic Use Exemption (TUE) approval process.

² The Adverse Analytical Findings (AAF) in years 2003 to 2007 included findings that are defined in following years as Atypical Findings.

³ Includes Adverse Analytical Findings and Atypical Findings

Table 2: Comparison of Years 2009 to 2013 - Olympic and Non-Olympic Figures



2013 Anti-Doping Testing Figures
Samples Analyzed and Reported by Accredited Laboratories in ADAMS

Table 3: Summary - Total Samples Analyzed

	Samples	ATF	AAF
ADAMS Urine Total	200,824	2,037	2,529
ADAMS Blood Total	6,689	1	11
ABP Total*	23,845	n/a	n/a
non-ADAMS Urine Total	60,510	394	989
non-ADAMS Blood Total	1,855	1	-
	293,723	2433	3529

* does not include the 32 ABP samples analyzed by the approved laboratory in Copenhagen

Table 4: Summary - Samples Analyzed per Laboratory (as reported in ADAMS)

Laboratory	Urine			Blood			Total % AAF	ABP Samples	Total Samples
	Samples	ATF	AAF	Samples	ATF	AAF			
Almaty, Kazakhstan	2957	13	21	0	0	0	0.71%	31	2988
Athens, Greece ³	4593	47	84	70	0	0	1.80%	n/a	4663
Bangkok, Thailand ³	3227	3	26	0	0	0	0.81%	n/a	3227
Barcelona, Spain	3443	21	32	251	0	0	0.87%	1206	4900
Beijing, China	15319	53	46	245	0	0	0.30%	540	16104
Bloemfontein, South Africa	3687	19	91	11	0	0	2.46%	331	4029
Bogota, Colombia	3786	4	35	80	0	0	0.91%	14	3880
Bucharest, Romania ³	3725	31	16	140	0	0	0.41%	n/a	3865
Cologne, Germany	16833	109	344	787	0	0	1.95%	2599	20219
New Delhi, India	6489	4	167	206	0	0	2.49%	14	6709
Dresden, Germany	9032	8	36	118	0	0	0.39%	2441	11591
Ghent, Belgium	6072	148	115	10	0	0	1.89%	398	6480
Havana, Cuba ³	2707	49	24	141	0	0	0.84%	n/a	2848
Helsinki, Finland	3621	95	24	27	0	0	0.66%	372	4020
Lausanne, Switzerland	5847	86	52	318	0	0	0.84%	2730	8895
Lisbon, Portugal	3196	57	25	203	0	0	0.74%	515	3914
London, UK	5641	18	37	887	0	0	0.57%	445	6973
Los Angeles, USA ³	5767	42	79	0	0	0	1.37%	n/a	5767
Madrid, Spain	4518	25	57	82	0	1	1.26%	112	4712
Montreal, Canada	7913	17	140	555	1	1	1.67%	574	9042
Moscow, Russia	18609	377	295	269	0	0	1.56%	4053	22931
Oslo, Norway	3877	187	42	55	0	8	1.27%	785	4717
Paris, France	9080	57	169	590	0	1	1.76%	1598	11268
Rio de Janeiro, Brazil ^{1,3}	2351	2	19	0	0	0	0.81%	n/a	2351
Rome, Italy	9082	170	87	486	0	0	0.91%	379	9947
Seibersdorf, Austria	6953	95	68	204	0	0	0.95%	668	7825
Seoul, Korea	4793	0	25	0	0	0	0.52%	153	4946
Stockholm, Sweden ³	3887	125	79	65	0	0	2.00%	n/a	3952
Sydney, Australia	6247	9	40	209	0	0	0.62%	1705	8161
Mexico City, Mexico ²	1305	37	109	13	0	0	8.27%	27	1345
Tokyo, Japan	7117	2	16	61	0	0	0.22%	72	7250
Salt Lake City, USA	5241	90	41	582	0	0	0.70%	1502	7325
Warsaw, Poland	3909	37	88	24	0	0	2.24%	581	4514
Totals	200,824	2,037	2,529	6,689	1	11		23,845	231,358

¹ Laboratory accreditation suspended in August 2013

² Laboratory accreditation granted on 26 June 2013

³ Not accredited in 2013 to perform blood analyses in support of the Athlete Biological Passport

Table 5: Total Samples Analyzed per Laboratory (not reported in ADAMS)

Laboratory	Urine			Blood			Total Samples	% AAF
	Samples	ATF	AAF	Samples	ATF	AAF		
Los Angeles, USA	32682	131	350	114	0	0	32796	1.1%
Montreal, Canada	10805	8	202	1310	1	0	12115	1.7%
Salt Lake City, USA	17023	255	437	431	0	0	17454	2.1%
Totals	60510	394	989	1855	1	0	62365	

Laboratory	Urine			Blood			Total Samples	% AAF
	Samples	ATF	AAF	Samples	ATF	AAF		
Lausanne, Switzerland*	280	0	5	112	0	0	392	1.27%

* samples from previous Olympic Games stored by the IOC for the purposes of further analysis. Not included in the aggregate total in Table 3.

2013 Anti-Doping Testing Figures
Samples Analyzed and Reported by Accredited Laboratories in ADAMS

Table 6: Total IC and OOC Samples Analyzed per Laboratory (as reported in ADAMS)

Laboratory	Samples	Urine						Blood*						Total
		IC		OOO		AAF		IC		OOO		AAF		
		ATF	AAF	Samples	ATF	AAF	Samples	ATF	AAF	Samples	ATF	AAF		
Almaty, Kazakhstan	675	2	9	2282	11	12	0	0	0	0	0	0	2957	
Athens, Greece	3736	36	76	857	11	8	70	0	0	0	0	0	4663	
Bangkok, Thailand	1960	2	22	1267	1	4	0	0	0	0	0	0	3227	
Barcelona, Spain	1590	3	22	1853	18	10	203	0	0	48	0	0	3694	
Beijing, China	6329	34	27	8990	19	19	55	0	0	190	0	0	15564	
Bloemfontein, South Africa	2933	13	79	754	6	12	0	0	0	11	0	0	3698	
Bogota, Colombia	3625	4	35	161	0	0	69	0	0	11	0	0	3866	
Bucharest, Romania	2223	16	10	1502	15	6	30	0	0	110	0	0	3865	
Cologne, Germany	9461	57	239	7372	52	105	173	0	0	614	0	0	17620	
New Delhi, India	4429	3	156	2060	1	11	47	0	0	159	0	0	6695	
Dresden, Germany	4567	6	33	4465	2	3	0	0	0	118	0	0	9150	
Ghent, Belgium	4370	106	88	1702	42	27	0	0	0	10	0	0	6082	
Havana, Cuba	1245	13	21	1462	36	3	0	0	0	141	0	0	2848	
Helsinki, Finland	1928	37	18	1693	58	6	0	0	0	27	0	0	3648	
Lausanne, Switzerland	2491	22	44	3356	64	8	151	0	0	167	0	0	6165	
Lisbon, Portugal	2268	30	23	928	27	2	0	0	0	203	0	0	3399	
London, UK	3469	15	24	2172	3	13	395	0	0	492	0	0	6528	
Los Angeles, USA	3427	19	62	2340	23	17	0	0	0	0	0	0	5767	
Madrid, Spain	3300	22	53	1218	3	4	65	0	1	17	0	0	4600	
Montreal, Canada	5931	15	122	1982	2	18	204	0	1	351	1	0	8468	
Moscow, Russia	10248	152	232	8361	225	63	170	0	0	99	0	0	18878	
Oslo, Norway	2124	81	36	1753	106	6	38	0	8	17	0	0	3932	
Paris, France	7276	56	158	1804	1	11	361	0	1	229	0	0	9670	
Rio de Janeiro, Brazil**	2324	2	19	27	0	0	0	0	0	0	0	0	2351	
Rome, Italy	7909	109	86	1173	61	1	273	0	0	213	0	0	9568	
Seibersdorf, Austria	4323	47	54	2630	48	14	10	0	0	194	0	0	7157	
Seoul, Korea	2574	0	14	2219	0	11	0	0	0	0	0	0	4793	
Stockholm, Sweden	1656	32	53	2231	93	26	17	0	0	48	0	0	3952	
Sydney, Australia	2678	5	35	3569	4	5	43	0	0	166	0	0	6456	
Mexico City, Mexico***	916	22	73	389	15	36	0	0	0	13	0	0	1318	
Tokyo, Japan	3849	2	12	3268	0	4	12	0	0	49	0	0	7178	
Salt Lake City, USA	2072	43	28	3169	47	13	76	0	0	506	0	0	5823	
Warsaw, Poland	2485	20	84	1424	17	4	4	0	0	20	0	0	3933	
Totals	120,391	1,026	2,047	80,433	1,011	482	2,466	-	11	4,223	1	-	207,513	

* these figures do not include blood samples taken for the ABP

** Laboratory accreditation suspended in August 2013

*** Laboratory accreditation granted on 26 June 2013

Table 7: Total IC and OOC Samples Analyzed per Laboratory (not reported in ADAMS)

Laboratory	Samples	Urine						Blood						Total
		IC		OOO		AAF		IC		OOO		AAF		
		ATF	AAF	Samples	ATF	AAF	Samples	ATF	AAF	Samples	ATF	AAF		
Los Angeles, USA	2498	2	101	30184	129	249	0	0	0	114	0	0	32796	
Montreal, Canada	8748	6	199	2057	2	3	1310	1	0	0	0	0	12115	
Salt Lake City, USA	1055	13	81	15968	242	356	2	0	0	429	0	0	17454	
Totals	12,301	21	381	48,209	373	608	1,312	1	-	543	-	-	62,365	
Laboratory	Samples	Urine			Blood			Total						
		IC ATF	AAF	OOO ATF	AAF	IC ATF	AAF							
Lausanne, Switzerland*	280	0	5	0	0	112	0	392						

* samples from previous Olympic Games stored by the IOC for the purposes of further analysis

Table 8: Total Samples Analyzed per Laboratory in Olympic Sports*

Laboratory	Urine						Blood**						Total	
	IC	OOC		IC	OOC		IC	OOC		IC	OOC			
	Samples	ATF	AAF	Samples	ATF	AAF	Samples	AAF	Samples	ATF	AAF	Samples	ATF	AAF
Almaty, Kazakhstan	646	2	9	2128	11	11	-	-	-	-	-	-	-	-
Athens, Greece	3356	35	51	703	9	6	70	0	0	0	0	0	0	0
Bangkok, Thailand	1530	2	9	902	1	3	-	-	-	-	-	-	-	-
Barcelona, Spain	1443	3	18	1760	18	7	203	0	41	0	0	0	0	0
Beijing, China	5894	30	20	8401	19	18	55	0	190	0	0	0	0	0
Bloemfontein, South Africa	2653	12	55	679	6	11	0	0	5	0	0	0	0	0
Bogota, Colombia	3050	3	20	101	0	0	59	0	11	0	0	0	0	0
Bucharest, Romania	1995	14	6	1312	15	3	25	0	110	0	0	0	0	0
Cologne, Germany	8261	52	188	6679	48	100	173	0	578	0	0	0	0	0
New Delhi, India	3823	2	123	1704	1	8	47	0	159	0	0	0	0	0
Dresden, Germany	3934	6	15	4127	1	3	0	0	118	0	0	0	0	0
Ghent, Belgium	3560	96	56	1469	34	1	0	0	10	0	0	0	0	0
Havana, Cuba	1055	9	4	1135	23	2	0	0	113	0	0	0	0	0
Helsinki, Finland	1319	28	6	1215	38	2	0	0	17	0	0	0	0	0
Lausanne, Switzerland	2135	17	26	3035	60	8	151	0	150	0	0	0	0	0
Lisbon, Portugal	1919	26	18	820	22	2	0	0	202	0	0	0	0	0
London, UK	2772	1	11	1612	0	12	269	0	370	0	0	0	0	0
Los Angeles, USA	3243	16	57	2079	19	10	-	-	-	-	-	-	-	-
Madrid, Spain	2816	20	37	1039	3	3	65	1	17	0	0	0	0	0
Montreal, Canada	5196	14	80	1641	0	12	181	1	333	1	0	0	0	0
Moscow, Russia	7931	132	146	7066	191	37	169	0	92	0	0	0	0	0
Oslo, Norway	1746	69	29	1419	83	2	28	0	17	0	0	0	0	0
Paris, France	6072	49	118	1715	1	7	347	1	207	0	0	0	0	0
Rio de Janeiro, Brazil***	2302	2	14	24	0	0	-	-	-	-	-	-	-	-
Rome, Italy	7210	105	72	1150	57	1	258	0	213	0	0	0	0	0
Seibersdorf, Austria	3880	46	33	2423	47	10	10	0	186	0	0	0	0	0
Seoul, Korea	1567	0	5	1251	0	1	-	-	-	-	-	-	-	-
Stockholm, Sweden	1252	19	33	1574	60	17	14	0	40	0	0	0	0	0
Sydney, Australia	1457	2	15	2159	3	1	39	0	85	0	0	0	0	0
Mexico City, Mexico****	775	16	60	206	10	4	0	0	13	0	0	0	0	0
Tokyo, Japan	3121	1	5	2864	0	1	12	0	47	0	0	0	0	0
Salt Lake City, USA	1795	35	13	2726	39	9	64	0	487	0	0	0	0	0
Warsaw, Poland	2209	15	39	1393	17	4	4	0	20	0	0	0	0	0
Totals	101,917	879	1,391	68,511	836	316	2,243	3	3,831	1	0	176,502		

* Olympic Sport data may include tests conducted in non-Olympic disciplines of the Sport

** These figures do not include blood samples taken for the ABP

*** Laboratory accreditation suspended in August 2013

**** Laboratory accreditation granted on 26 June 2013

Table 9: Total Samples Analyzed per Laboratory in non-Olympic Sports

Laboratory	Urine						Blood*						Total
	IC			OOC			IC			OOC			
	Samples	ATF	AAF	Samples	ATF	AAF	Samples	ATF	AAF	Samples	ATF	AAF	
Almaty, Kazakhstan	29	0	0	154	0	1	0	0	0	0	0	0	183
Athens, Greece	380	1	25	154	2	2	0	0	0	0	0	0	534
Bangkok, Thailand	430	0	13	365	0	1	0	0	0	0	0	0	795
Barcelona, Spain	147	0	4	93	0	3	0	0	7	0	0	0	247
Beijing, China	435	4	7	589	0	1	0	0	0	0	0	0	1024
Bloemfontein, South Africa	280	1	24	75	0	1	0	0	6	0	0	0	361
Bogota, Colombia	575	1	15	60	0	0	10	0	0	0	0	0	645
Bucharest, Romania	228	2	4	190	0	3	5	0	0	0	0	0	423
Cologne, Germany	1200	5	51	693	4	5	0	0	36	0	0	0	1929
New Delhi, India	606	1	33	356	0	3	0	0	0	0	0	0	962
Dresden, Germany	633	0	18	338	1	0	0	0	0	0	0	0	971
Ghent, Belgium	810	10	32	233	8	26	0	0	0	0	0	0	1043
Havana, Cuba	190	4	17	327	13	1	0	0	28	0	0	0	545
Helsinki, Finland	609	9	12	478	20	4	0	0	10	0	0	0	1097
Lausanne, Switzerland	356	5	18	321	4	0	0	0	17	0	0	0	694
Lisbon, Portugal	349	4	5	108	5	0	0	0	1	0	0	0	458
London, UK	697	14	13	560	3	1	126	0	122	0	0	0	1505
Los Angeles, USA	184	3	5	261	4	7	0	0	0	0	0	0	445
Madrid, Spain	484	2	16	179	0	1	0	0	0	0	0	0	663
Montreal, Canada	735	1	42	341	2	6	23	0	18	0	0	0	1117
Moscow, Russia	2317	20	86	1295	34	26	1	0	7	0	0	0	3620
Oslo, Norway	378	12	7	334	23	4	10	8	0	0	0	0	722
Paris, France	1204	7	40	89	0	4	14	0	22	0	0	0	1329
Rio de Janeiro, Brazil**	22	0	5	3	0	0	0	0	0	0	0	0	25
Rome, Italy	699	4	14	23	4	0	15	0	0	0	0	0	737
Seibersdorf, Austria	443	1	21	207	1	4	0	0	8	0	0	0	658
Seoul, Korea	1007	0	9	968	0	10	0	0	0	0	0	0	1975
Stockholm, Sweden	404	13	20	657	33	9	3	0	8	0	0	0	1072
Sydney, Australia	1221	3	20	1410	1	4	4	0	81	0	0	0	2716
Mexico City, Mexico***	141	6	13	183	5	32	0	0	0	0	0	0	324
Tokyo, Japan	728	1	7	404	0	3	0	0	2	0	0	0	1134
Salt Lake City, USA	277	8	15	443	8	4	12	0	19	0	0	0	751
Warsaw, Poland	276	5	45	31	0	0	0	0	0	0	0	0	307
Totals	18,474	147	656	11,922	175	166	223	8	392	-	-	-	31,011

* These figures do not include blood samples taken for the ABP

** Laboratory accreditation suspended in August 2013

*** Laboratory accreditation granted on 26 June 2013

Table 10: GC/C/IRMS and EPO Tests Conducted per Laboratory

Laboratory	Urine GC/C/IRMS						Urine EPO (including recombinant EPOs and analogues)							
	IC		OOO		Total Samples	% AAF	IC		OOO		Total Samples	% AAF		
	Samples	AAF	Samples	AAF			Samples	ATF	AAF	Samples			ATF	AAF
Almaty, Kazakhstan	2	2	15	2	17	23.5%	-	-	-	-	-	-	-	
Athens, Greece	25	2	10	1	35	8.6%	821	0	0	170	0	0	991	0%
Bangkok, Thailand	2	1	-	-	2	50.0%	-	-	-	-	-	-	-	-
Barcelona, Spain	17	0	29	2	46	4.3%	324	0	2	586	0	0	910	0.2%
Beijing, China	271	2	415	0	686	0.3%	684	0	0	789	0	0	1473	0%
Bloemfontein, South Africa	40	7	21	8	61	24.6%	428	0	0	141	0	0	569	0%
Bogota, Colombia	74	2	4	0	78	2.6%	131	0	0	21	0	0	152	0%
Bucharest, Romania	14	1	13	0	27	3.7%	69	0	0	64	0	1	133	0.8%
Cologne, Germany	200	14	169	4	369	4.9%	861	3	2	2753	2	3	3614	0.1%
New Delhi, India	16	12	2	2	18	77.8%	172	0	0	12	0	0	184	0%
Dresden, Germany	84	2	97	0	181	1.1%	646	0	0	1679	0	0	2325	0%
Ghent, Belgium	104	1	51	4	155	3.2%	1133	0	4	545	0	0	1678	0.2%
Havana, Cuba	-	-	-	-	-	-	13	0	0	10	0	0	23	0%
Helsinki, Finland	38	0	98	0	136	0%	30	0	0	132	0	0	162	0%
Lausanne, Switzerland*	133	7	305	2	438	2.1%	451	0	2	1033	0	2	1484	0.3%
Lisbon, Portugal	6	0	1	-	7	-	48	0	0	280	0	1	328	0.3%
London, UK	167	1	124	0	291	0.3%	520	0	0	243	0	0	763	0%
Los Angeles, USA	107	4	168	6	275	3.6%	380	0	6	299	0	0	679	0.9%
Madrid, Spain ¹	69	1	27	0	96	1.0%	281	0	4	153	0	0	434	0.9%
Montreal, Canada ²	509	10	136	1	645	1.7%	685	0	4	328	0	0	1013	0.4%
Moscow, Russia	319	14	334	4	653	2.8%	1701	0	3	1472	0	4	3173	0.2%
Oslo, Norway	61	1	94	2	155	1.9%	138	0	2	111	0	0	249	0.8%
Paris, France ³	336	9	150	0	486	1.9%	610	2	2	67	0	0	677	0.3%
Rio de Janeiro, Brazil**	-	-	-	-	-	-	38	0	0	1	0	0	39	0%
Rome, Italy	108	9	56	0	164	5.5%	875	0	7	458	0	0	1333	0.5%
Seibersdorf, Austria	43	1	118	3	161	2.5%	682	0	1	318	0	3	1000	0.4%
Seoul, Korea	11	0	3	0	14	0%	26	0	0	15	0	0	41	0%
Stockholm, Sweden	32	1	99	5	131	4.6%	60	0	0	43	0	0	103	0%
Sydney, Australia	32	0	66	2	98	2.0%	221	0	0	387	0	0	608	0%
Mexico City, Mexico***	1	0	-	-	1	0%	18	0	0	-	-	-	18	0%
Tokyo, Japan	82	0	79	0	161	0%	125	0	0	54	0	0	179	0%
Salt Lake City, USA	168	5	261	7	429	2.8%	345	0	0	723	0	0	1068	0%
Warsaw, Poland	39	1	30	0	69	1.4%	145	0	0	75	0	0	220	0%
Totals	3,110	110	2,975	55	6,085	2.7%	12,661	5	39	12,962	2	14	25,623	0.2%

* Laboratory also performed the following tests in samples provided by the IOC for further analysis: 102 GC/C/IRMS, 89 EPO in Urine and 112 EPO in Blood

** Laboratory accreditation suspended in August 2013

*** Laboratory accreditation granted on 26 June 2013

¹ Laboratory also reported one (1) EPO AAF in blood (IC sample)

² Laboratory also reported two (2) EPO AAFs in blood (one IC and one OOC sample)

³ Laboratory also reported one (1) EPO AAF in blood (IC sample)

2013 Anti-Doping Testing Figures
Samples Analyzed and Reported by Accredited Laboratories in ADAMS

Table 11: hGH, HBT (Transfusion) and HBOCs Tests Conducted per Laboratory

Laboratory	hGH ¹						Blood HBT (Transfusion)						HBOCs					
	IC		OOOC		Total	% AAF	IC		OOOC		Total	% AAF	IC		OOOC		Total	% AAF
	Samples	AAF	Samples	AAF			Samples	AAF	Samples	AAF			Samples	AAF	Samples	AAF		
Almaty, Kazakhstan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Athens, Greece	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bangkok, Thailand	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barcelona, Spain	-	-	15	0	15	0%	18	0	11	0	29	0%	128	0	11	0	139	0%
Beijing, China	2	0	116	0	118	0%	-	-	5	0	5	0%	-	-	-	-	-	-
Bloemfontein, South Africa	-	-	11	0	11	0%	-	-	-	-	-	-	-	-	-	-	-	-
Bogota, Colombia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bucharest, Romania	30	0	110	0	140	0%	-	-	-	-	-	-	-	-	-	-	-	-
Cologne, Germany	15	0	185	0	200	0%	33	0	239	0	272	0%	109	0	238	0	347	0%
New Delhi, India	42	0	126	0	168	0%	-	-	33	0	33	0%	42	0	159	0	201	0%
Dresden, Germany	-	-	95	-	95	0%	-	-	-	-	-	-	-	-	3	0	3	0%
Ghent, Belgium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Havana, Cuba	-	-	141	0	141	0%	-	-	-	-	-	-	-	-	-	-	-	-
Helsinki, Finland	-	-	27	0	27	0%	-	-	-	-	-	-	-	-	-	-	-	-
Lausanne, Switzerland	16	0	55	0	71	0%	3	0	27	0	30	0%	-	-	31	0	31	0%
Lisbon, Portugal	-	-	50	0	50	0%	-	-	-	-	-	-	-	-	-	-	-	-
London, UK	58	0	157	0	215	0%	-	-	-	-	-	-	-	-	-	-	-	-
Los Angeles, USA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Madrid, Spain	-	-	11	0	11	0%	-	-	-	-	-	-	-	-	-	-	-	-
Montreal, Canada	35	0	79	0	114	0%	18	0	45	0	63	0%	7	0	56	0	63	0%
Moscow, Russia	52	0	12	0	64	0%	118	0	25	0	143	0%	-	-	34	0	34	0%
Oslo, Norway	-	-	12	0	12	0%	8	0	-	-	8	0%	6	0	-	-	6	0%
Paris, France	123	0	87	0	210	0%	-	-	-	-	-	-	8	0	13	0	21	0%
Rio de Janeiro, Brazil*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rome, Italy	14	0	117	0	131	0%	196	0	1	0	197	0%	49	0	1	0	50	0%
Seibersdorf, Austria	-	-	192	0	192	0%	-	-	-	-	-	-	-	-	27	0	27	0%
Seoul, Korea	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stockholm, Sweden	11	0	36	0	47	0%	-	-	-	-	-	-	-	-	-	-	-	-
Sydney, Australia	37	0	141	0	178	0%	-	-	-	-	-	-	43	0	163	0	206	0%
Mexico City, Mexico**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tokyo, Japan	-	-	2	0	2	0%	-	-	-	-	-	-	6	0	34	0	40	0%
Salt Lake City, USA	74	0	499	0	573	0%	-	-	-	-	-	-	-	-	-	-	-	-
Warsaw, Poland	-	-	13	0	13	0%	4	0	2	0	6	0.0%	-	-	13	0	13	0%
Totals	509	0	2289	0	2798		398	0	388	0	786		398	0	783	0	1181	

¹ hGH reporting delayed from 28 Mar 2013 to 31 Dec 2013

* Laboratory accreditation revoked in 2013

** Laboratory accreditation granted on 26 June 2013

Table 12: Summary - Substances (AAFs and ATFs) Identified in Each Drug Class in ADAMS (All Sports)

Substance Group	Occurrences	% of all ADAMS reported findings
S1. Anabolic Agents	3320	63%
S6. Stimulants	530	10%
S5. Diuretics and Other Masking Agents	393	7.5%
S9. Glucocorticosteroids	330	6.3%
S2. Peptide Hormones, Growth Factors and Related Substances	202	3.8%
S8. Cannabinoids	188	3.6%
S3. Beta-2 Agonists	138	2.6%
S4. Hormone and Metabolic Modulators	93	1.8%
S7. Narcotics	43	0.8%
P2. Beta-Blockers	25	0.5%
P1. Alcohol	8	0.2%
M2. Chemical and Physical Manipulation	1	0.02%
M1. Enhancement of Oxygen Transfer	0	0.0%
TOTAL*	5271	

* The *Adverse Analytical Findings* (AAFs) and *Atypical Findings* (ATFs) in this report are not to be confused with adjudicated or sanctioned Anti-Doping Rule Violations (ADRVs), as the figures given in this report may contain findings that underwent the Therapeutic Use Exemption (TUE) approval process or multiple findings on the same Athlete. In addition *Atypical Findings* may correspond to multiple measurements performed on the same *Athlete*, such as in the case of longitudinal studies on testosterone.

Table 13: Substances (AAFs and ATFs) Identified in Each Drug Class in ADAMS (All Sports)

S1.1 Anabolic Agents	Occurrences	% within drug class
T/E ratio > 4	1859	59.6%
stanozolol	329	10.6%
dehydrochloromethyl-testosterone	217	7.0%
19-norandrosterone	183	5.9%
metandienone	120	3.8%
boldenone	77	2.5%
drostanolone	62	2.0%
metenolone	62	2.0%
oxandrolone	43	1.4%
trenbolone	28	0.9%
mesterolone	19	0.6%
testosterone	18	0.6%
3a-hydroxy-5a-androstan-17-one	16	0.5%
prasterone (dehydroepiandrosterone, DHEA)	16	0.5%
clostebol	13	0.4%
methasterone	10	0.3%
oxymetholone	9	0.3%
methyltestosterone	7	0.2%
boldione	5	0.2%
1-androstendione	3	0.1%
1-testosterone	2	0.1%
5a-androstane-3a,17b-diol	2	0.1%
danazol	2	0.1%
etiocholanolone	2	0.1%
methyltrienolone	2	0.1%
19-norandrostenedione	1	0.0%
5b-androstan-3a,17b-diol	1	0.03%
androstenedione (androst-4-ene-3,17-dione)	1	0.03%
desoxymethyltestosterone	1	0.03%
dihydrotestosterone	1	0.03%
fluoxymesterone	1	0.03%
formestane	1	0.03%
methyl-1-testosterone	1	0.03%
methylclostebol	1	0.03%
oxabolone	1	0.03%
promagnon	1	0.03%
stenbolone	1	0.03%
TOTAL*	3118	
S1.2 Other Anabolic Agents	Occurrences	% within drug class
clenbuterol	183	90.6%
selective androgen receptor modulators (SARMs)	13	6.4%
tibolone	5	2.5%
zeranol	1	0.5%
TOTAL*	202	

* The *Adverse Analytical Findings* (AAF) and *Atypical Findings* (ATF) in this report are not to be confused with adjudicated or sanctioned Anti-Doping Rule Violations (ADRV), as the figures given in this report may contain findings that underwent the Therapeutic Use Exemption (TUE) approval process or multiple findings on the same Athlete. In addition, *Atypical Findings* may correspond to multiple measurements performed on the same *Athlete*, such as in the case of longitudinal studies on testosterone.

Table 13: Substances (AAFs and ATFs) Identified in Each Drug Class in ADAMS (All Sports) - continued

S.2 Peptide Hormones, Growth Factors and Related Substances	Occurrences	% within drug class
chorionic gonadotrophin (CG)	124	61.4%
erythropoietin (EPO)	56	27.7%
luteinizing hormone (LH)	15	7.4%
darbepoetin (dEPO)	5	2.5%
methoxy polyethylene glycol-epoetin beta (CERA)	2	1.0%
TOTAL*	202	

S.3 Beta-2 Agonists	Occurrences	% within drug class
terbutaline	103	74.6%
fenoterol	15	10.9%
salbutamol	11	8.0%
salmeterol	9	6.5%
TOTAL*	138	

S.4 Hormone and Metabolic Modulators	Occurrences	% within drug class
tamoxifen	40	43.0%
clomiphene	24	25.8%
peroxisome proliferator activated receptor δ (PPAR δ) agonists (GW1516)	11	11.8%
anastrozole	6	6.5%
letrozole	5	5.4%
androstatrienedione	2	2.2%
androstene-3,6,17 trione (6-oxo)	2	2.2%
insulin (aspart)	1	1.1%
insulin (humalog)	1	1.1%
toremifene	1	1.1%
TOTAL*	93	

S.5 Diuretics and Other Masking Agents	Occurrences	% within drug class
furosemide	145	36.9%
hydrochlorothiazide	125	31.8%
canrenone	23	5.9%
chlorothiazide	23	5.9%
amiloride	18	4.6%
triamterene	15	3.8%
acetazolamide	14	3.6%
indapamide	6	1.5%
glycerol	5	1.3%
probenecid	5	1.3%
chlortalidone	3	0.8%
spironolactone	3	0.8%
bumetanide	2	0.5%
4-amino-6-chloro-1,3-benzenedisulfonamide	1	0.3%
dextran	1	0.3%
dorzolamide	1	0.3%
eplerenone	1	0.3%
torasemide	1	0.3%
trichloromethiazide	1	0.3%
TOTAL*	393	

* The *Adverse Analytical Findings* (AAF) and *Atypical Findings* (ATF) in this report are not to be confused with adjudicated or sanctioned Anti-Doping Rule Violations (ADRV), as the figures given in this report may contain findings that underwent the Therapeutic Use Exemption (TUE) approval process or multiple findings on the same Athlete. In addition, *Atypical Findings* may correspond to multiple measurements performed on the same *Athlete*, such as in the case of longitudinal studies on testosterone.

Table 13: Substances (AAFs and ATFs) Identified in Each Drug Class in ADAMS (All Sports) - continued

S.6 Stimulants	Occurrences	% within drug class
methylhexaneamine (dimethylpentylamine)	169	31.9%
methylphenidate	66	12.5%
cocaine	52	9.8%
amfetamine	47	8.9%
oxilofrine (methysynephrine)	22	4.2%
sibutramine	20	3.8%
tuaminoheptane	15	2.8%
fonturacetam [4-phenylpiracetam (carphedon)]	10	1.9%
ephedrine	10	1.9%
methylenedioxyamphetamine	9	1.7%
modafinil	8	1.5%
cathine	7	1.3%
methamphetamine (D-)	7	1.3%
phentermine	7	1.3%
pseudoephedrine	7	1.3%
d-amphetamine/dextroamphetamine	6	1.1%
heptaminol	6	1.1%
mephentermine	6	1.1%
pseudoephedrine	6	1.1%
beta-methylphenylethylamine	5	0.9%
isometheptene	4	0.8%
N-ethyl-1-phenylbutan-2-amine	4	0.8%
nikethamide	4	0.8%
hydroxyamphetamine (parahydroxyamphetamine)	3	0.6%
N, alpha-diethyl-benzeneethanamine	3	0.6%
N,N-dimethyl-2-phenylpropan-1-amine	3	0.6%
1-Phenylbutan-2-amine	2	0.4%
amfepramone	2	0.4%
beta-methylphenethylamine	2	0.4%
bromantan	2	0.4%
N, alpha-diethylbenzeneethanamine	2	0.4%
octopamine	2	0.4%
phenpromethamine	2	0.4%
2-amino-N-ethyl-1-phenylbutan (N,alfa-diethyl-benzeneethanamine)	1	0.2%
cathinone and its analogues	1	0.2%
etamivan	1	0.2%
hydroxyamphetamine	1	0.2%
levmethamphetamine	1	0.2%
mephedrone	1	0.2%
methylephedrine	1	0.2%
N-ethyl-1-phenyl-2-butanamine	1	0.2%
strychnine	1	0.2%
tenamfetamine (methylenedioxyamphetamine)	1	0.2%
TOTAL*	530	

* The Adverse Analytical Findings (AAF) and Atypical Findings (ATF) in this report are not to be confused with adjudicated or sanctioned Anti-Doping Rule Violations (ADRV), as the figures given in this report may contain findings that underwent the Therapeutic Use Exemption (TUE) approval process or multiple findings on the same Athlete. In addition, Atypical Findings may correspond to multiple measurements performed on the same Athlete, such as in the case of longitudinal studies on testosterone.

Table 13: Substances (AAFs and ATFs) Identified in Each Drug Class in ADAMS (All Sports) - continued

S.7 Narcotics	Occurrences	% within drug class
morphine	25	58.1%
oxycodone	6	14.0%
methadone	5	11.6%
fentanyl and its derivatives	4	9.3%
buprenorphine	2	4.7%
pethidine (meperidine)	1	2.3%
TOTAL*	43	

S.8 Cannabinoids	Occurrences	% within drug class
carboxy-THC	175	93.1%
JWH-018	8	4.3%
JWH-073	4	2.1%
N-(adamantan-1-yl)-1-(5-fluoropentyl)-1H-indole-3-carboxamide (STS-135) metabolites	1	0.5%
TOTAL*	188	

S.9 Glucocorticosteroids	Occurrences	% within drug class
budesonide	135	40.9%
prednisolone	58	17.6%
prednisone	55	16.7%
betamethasone	35	10.6%
dexamethasone	18	5.5%
methylprednisolone	14	4.2%
triamcinolone acetonide	12	3.6%
fluticasone propionate	2	0.6%
triamcinolone	1	0.3%
TOTAL*	330	

P1. Alcohol	Occurrences	% within drug class
alcohol	8	100%
TOTAL*	8	

P2. Beta-Blockers	Occurrences	% within drug class
propranolol	8	32.0%
bisoprolol	7	28.0%
metoprolol	5	20.0%
atenolol	3	12.0%
celiprolol	1	4.0%
carteolol	1	4.0%
TOTAL*	25	

M2. Chemical and Physical Manipulation	Occurrences	% within drug class
chemical and physical manipulation	1	100%
TOTAL*	1	

* The *Adverse Analytical Findings* (AAFs) and *Atypical Findings* (ATFs) in this report are not to be confused with adjudicated or sanctioned Anti-Doping Rule Violations (ADRVs), as the figures given in this report may contain findings that underwent the Therapeutic Use Exemption (TUE) approval process or multiple findings on the same Athlete. In addition, *Atypical Findings* may correspond to multiple measurements performed on the same *Athlete*, such as in the case of longitudinal studies on testosterone.

2013 Anti-Doping Testing Figures
Samples Analyzed and Reported by Accredited Laboratories in ADAMS

Table 14: Total Laboratory AAFs* and ATFs* per Drug Class as Reported in ADAMS (All Sports)

Laboratory	Anabolic Agents	Peptide Hormones, Growth Factors and Related Substances	Beta-2 Agonists	Hormone and Metabolic Modulators	Diuretics and Other Masking Agents	Stimulants	Narcotics	Cannabinoids	Glucocorticosteroids	Alcohol	Beta-Blockers	Enhancement of Oxygen Transfer	Chemical and Physical Manipulation	Total Findings per Lab	% of total Findings
	S1.	S2.	S3.	S4.	S5.	S6.	S7.	S8.	S9.	P1.	P2.	M1.	M2.		
Almaty, Kazakhstan	16	-	-	-	2	2	-	1	-	-	-	-	-	21	0.4%
Athens, Greece	82	8	3	3	20	16	-	5	7	-	-	-	-	144	2.7%
Bangkok, Thailand	18	3	1	1	12	6	-	-	1	-	-	-	-	42	0.8%
Barcelona, Spain	33	2	8	-	4	3	-	1	8	-	-	-	-	59	1.1%
Beijing, China	29	4	1	-	13	2	-	-	7	-	2	-	-	58	1.1%
Bloemfontein, South Africa	49	1	1	1	14	34	-	4	11	-	-	-	-	115	2.2%
Bogota, Colombia	13	-	-	1	10	19	-	-	3	-	-	-	-	46	0.9%
Bucharest, Romania	40	2	-	-	2	3	-	1	2	-	-	-	-	50	0.9%
Cologne, Germany	437	16	3	7	21	37	10	13	19	-	2	-	1	566	10.7%
New Delhi, India	129	5	1	4	15	51	-	12	11	-	-	-	-	228	4.3%
Dresden, Germany	47	-	2	3	12	4	2	7	2	-	-	-	-	79	1.5%
Ghent, Belgium	215	11	3	8	7	28	1	23	15	-	1	-	-	312	5.9%
Havana, Cuba	69	-	-	-	14	-	-	-	3	-	1	-	-	87	1.7%
Helsinki, Finland	121	1	1	3	3	2	-	1	1	-	1	-	-	134	2.5%
Lausanne, Switzerland	121	7	2	2	4	12	3	8	11	-	-	-	-	170	3.2%
Lisbon, Portugal	62	1	1	1	3	9	-	6	2	-	1	-	-	86	1.6%
London, UK	12	17	3	1	7	14	1	6	2	-	2	-	-	65	1.2%
Los Angeles, USA	62	6	3	5	19	21	1	5	8	-	-	-	-	130	2.5%
Madrid, Spain	33	7	7	2	14	22	-	5	17	-	4	-	-	111	2.1%
Montreal, Canada	77	6	9	15	46	27	4	6	8	-	4	-	-	202	3.8%
Moscow, Russia	575	8	11	5	48	48	2	15	25	-	2	-	-	739	14.0%
Oslo, Norway	209	3	12	-	-	9	2	3	4	8	1	-	-	251	4.8%
Paris, France	93	28	12	6	10	33	13	31	79	-	2	-	-	307	5.8%
Rio de Janeiro, Brazil	2	2	2	6	5	7	-	-	4	-	-	-	-	28	0.5%
Rome, Italy	179	31	7	-	12	13	1	15	24	-	1	-	-	283	5.4%
Seibersdorf, Austria	145	6	4	4	19	6	-	6	14	-	-	-	-	204	3.9%
Seoul, Korea	10	1	-	-	10	4	1	-	-	-	-	-	-	26	0.5%
Stockholm, Sweden	139	-	32	-	1	6	-	5	30	-	-	-	-	213	4.0%
Sydney, Australia	7	11	2	-	7	24	1	2	4	-	-	-	-	58	1.1%
Mexico City, Mexico	138	-	-	-	5	13	-	1	2	-	-	-	-	159	3.0%
Tokyo, Japan	8	1	-	-	7	2	-	-	1	-	-	-	-	19	0.4%
Salt Lake City, USA	62	1	7	1	10	14	1	2	-	-	-	-	-	98	1.9%
Warsaw, Poland	88	13	-	14	17	39	-	4	5	-	1	-	-	181	3.4%
TOTAL PER DRUG CLASS	3320	202	138	93	393	530	43	188	330	8	25	0	1	5271	
% of Drug Class	63.0%	3.8%	2.6%	1.8%	7.5%	10.1%	0.8%	3.6%	6.3%	0.2%	0.5%	0%	0.02%		

* **The Adverse Analytical Findings (AAFs) and Atypical Findings (ATFs) in this report are not to be confused with adjudicated or sanctioned Anti-Doping Rule Violations (ADRVs)**, as the figures given in this report may contain findings that underwent the Therapeutic Use Exemption (TUE) approval process or multiple findings on the same *Athlete*. In addition, *Atypical Findings* may correspond to multiple measurements performed on the same *Athlete*, such as in the case of longitudinal studies on testosterone.