

2010 Adverse Analytical Findings and Atypical Findings Reported by Accredited Laboratories

Overview of Results

Table A All Sports

Differentiation between Olympic and Non-Olympic Sports	A Samples Analyzed	A Samples Adverse Analytical Findings ^{1,3}		A Samples Atypical Findings ^{2,3}		A Samples Total Findings ³	
		(%)	(%)	(%)	(%)	(%)	(%)
Olympic Sports	180,584	1,624	(0.90%)	1,593	(0.88%)	3,217	(1.78%)
Non-Olympic Sports	77,683	1,166	(1.50%)	435	(0.56%)	1,601	(2.06%)
TOTAL	258,267	2,790	(1.08%)	2,027	(0.78%)	4,817	(1.87%)

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*

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Comparison of Years 2003 to 2010

Table A1 Olympic and Non-Olympic Statistics

Differentiation between Olympic and Non-Olympic Sports	2003	2004	2005	2006	2007	2008	2009	2010	A Samples Analyzed 2010 vs 2009
	A Samples Analyzed	A Samples Analyzed	A Samples Analyzed	A Samples Analyzed	A Samples Analyzed	A Samples Analyzed	A Samples Analyzed	A Samples Analyzed	
Olympic Sports	113,559	128,591	139,836	156,866	174,483	202,067	187,029	180,584	-3.4%
Non-Olympic Sports	37,651	40,596	43,501	41,277	49,415	72,548	90,899	77,683	-15%
TOTAL	151,210	169,187	183,337	198,143	223,898	274,615	277,928	258,267	-7.1%

Differentiation between Olympic and Non-Olympic Sports	2003	2004	2005	2006	2007	2008	2009	2010	Total Findings ³ 2010 vs 2009
	AAFs ^{1,2}	AAFs ^{1,2}	AAFs ^{1,2}	AAFs ^{1,2}	AAFs ^{1,2}	AAFs ¹	AAFs ¹	AAFs ¹	
Olympic Sports	1,707	2,145	2,958	2,915	3,375	1,974	1,674	1,624	-13%
Non-Olympic Sports	740	764	951	972	1,027	1,346	1,417	1,166	-16%
TOTAL	2,447	2,909	3,909	3,887	4,402	2,956	3,091	2,790	-14%

Differentiation between Olympic and Non-Olympic Sports	2003	2004	2005	2006	2007	2008	2009	2010	% Total Findings ³ 2010 vs 2009
	% Total Findings ³	% Total Findings ³	% Total Findings ³	% Total Findings ³	% Total Findings ³	% AAFs ¹	% AAFs ¹	% AAFs ¹	
Olympic Sports	1.50	1.67	2.12	1.86	1.93	0.98	0.90	0.90	-0.20
Non-Olympic Sports	1.97	1.88	2.19	2.35	2.08	1.35	1.56	1.50	-0.04
Overall	1.62	1.72	2.13	1.96	1.97	1.08	1.11	1.08	-0.15

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² The Adverse Analytical Findings (AAF) in years 2003 to 2007 included findings that are defined in 2008 and 2009 as Atypical Findings.

³ Includes Adverse Analytical Findings and Atypical Findings

**2010 Adverse Analytical Findings and Atypical Findings
Reported by Accredited Laboratories (Total and in ADAMS)**

Total Results per Laboratory (All Sports)

Table B

	Laboratory	N Samples	N AAFs¹	N AAFs⁴ reported in ADAMS	% AAFs¹	N ATFs²	N ATFs⁴ reported in ADAMS	% Total Findings³
1	Sydney, Australia	7,157	55	55	0.77%	13	13	0.95%
2	Seibersdorf, Austria	5,950	89	89	1.50%	23	23	1.88%
3	Ghent, Belgium	6,196	170	170	2.74%	131	131	4.86%
4	Rio de Janeiro, Brazil	4,875	39	39	0.80%	-	-	0.80%
5	Montreal, Canada	19,397	245	143	1.26%	52	27	1.53%
6	Beijing, China	14,738	72	72	0.49%	3	3	0.51%
7	Bogota, Colombia	2,768	35	35	1.26%	28	28	2.28%
8	Havana, Cuba	2,238	15	15	0.67%	27	27	1.88%
9	Prague, Czech Republic	1,661	17	17	1.02%	37	37	3.25%
10	Helsinki, Finland	2,704	24	24	0.89%	42	42	2.44%
11	Paris, France	10,222	233	233	2.28%	221	221	4.44%
12	Cologne, Germany	13,454	191	191	1.42%	8	8	1.48%
13	Dresden, Germany	7,676	25	25	0.33%	-	-	0.33%
14	London, UK	7,566	43	43	0.57%	5	5	0.63%
15	Athens, Greece	2,845	17	17	0.60%	8	8	0.88%
16	Rome, Italy	10,128	137	137	1.35%	196	196	3.29%
17	Tokyo, Japan	6,729	13	13	0.19%	4	4	0.25%
18	Seoul, Korea	4,108	42	42	1.02%	19	19	1.48%
19	Penang, Malaysia	664	18	18	2.71%	5	5	3.46%
20	Oslo, Norway	4,405	55	55	1.25%	54	54	2.47%
21	Warsaw, Poland	3,140	28	28	0.89%	74	74	3.25%
22	Lisbon, Portugal	3,620	58	58	1.60%	70	70	3.54%
23	Bloemfontein, South Africa	3,798	44	44	1.16%	22	22	1.74%
24	Moscow, Russia	15,748	115	115	0.73%	233	233	2.21%
25	Barcelona, Spain	3,803	71	71	1.87%	41	41	2.95%
26	Madrid, Spain	6,882	100	100	1.45%	292	292	5.70%
27	Stockholm, Sweden	4,328	91	91	2.10%	78	78	3.90%
28	Lausanne, Switzerland	7,877	39	39	0.50%	61	61	1.27%
29	Bangkok, Thailand	1,656	27	27	1.63%	1	1	1.69%
30	Tunis, Tunisia	2,515	21	21	0.83%	16	16	1.47%
31	Ankara, Turkey	3,666	44	44	1.20%	-	-	1.20%
32	Los Angeles, USA	41,559	291	48	0.70%	198	59	1.18%
33	Salt Lake City, USA	14,005	98	14	0.70%	42	11	1.00%
34	New Delhi, India	7,023	199	199	2.83%	4	4	2.89%
35	Bucharest, Romania	3,166	29	29	0.92%	19	19	1.52%
	TOTAL	258,267	2,790	2,361	1.08%	2,027	1,832	1.87%

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

⁴ AAFs and ATFs as compiled from ADAMS

**2010 Adverse Analytical Findings and Atypical Findings
Reported by Accredited Laboratories**

Table B1 Olympic Sports Results per Laboratory

Laboratory		N Samples	N Adverse Analytical Findings ¹	% Adverse Analytical Findings ¹	N Atypical Findings ²	% Total Findings ³
1	Sydney, Australia	3,647	20	0.55%	5	0.69%
2	Seibersdorf, Austria	5,278	54	1.02%	22	1.44%
3	Ghent, Belgium	4,991	83	1.66%	118	4.03%
4	Rio de Janeiro, Brazil	4,786	24	0.50%	-	0.50%
5	Montreal, Canada	13,711	175	1.28%	41	1.58%
6	Beijing, China	13,378	55	0.41%	1	0.42%
7	Bogota, Colombia	2,348	18	0.77%	28	1.96%
8	Havana, Cuba	2,014	11	0.55%	22	1.64%
9	Prague, Czech Republic	1,383	9	0.65%	29	2.75%
10	Helsinki, Finland	1,909	10	0.52%	35	2.36%
11	Paris, France	7,859	153	1.95%	180	4.24%
12	Cologne, Germany	11,662	128	1.10%	5	1.14%
13	Dresden, Germany	6,927	16	0.23%	-	0.23%
14	London, UK	5,323	22	0.41%	3	0.47%
15	Athens, Greece	2,691	17	0.63%	8	0.93%
16	Rome, Italy	9,429	123	1.30%	182	3.23%
17	Tokyo, Japan	5,169	5	0.10%	2	0.14%
18	Seoul, Korea	2,924	16	0.55%	11	0.92%
19	Penang, Malaysia	574	11	1.92%	3	2.44%
20	Oslo, Norway	3,610	29	0.80%	43	1.99%
21	Warsaw, Poland	2,783	14	0.50%	62	2.73%
22	Lisbon, Portugal	2,974	41	1.38%	67	3.63%
23	Bloemfontein, South Africa	2,751	24	0.87%	14	1.38%
24	Moscow, Russia	13,967	67	0.48%	207	1.96%
25	Barcelona, Spain	3,573	51	1.43%	36	2.43%
26	Madrid, Spain	5,734	58	1.01%	250	5.37%
27	Stockholm, Sweden	3,116	68	2.18%	54	3.92%
28	Lausanne, Switzerland	7,402	32	0.43%	59	1.23%
29	Bangkok, Thailand	1,068	20	1.87%	-	1.87%
30	Tunis, Tunisia	2,251	10	0.44%	16	1.16%
31	Ankara, Turkey	3,185	32	1.00%	-	1.00%
32	Los Angeles, USA	10,863	90	0.83%	65	1.43%
33	Salt Lake City, USA	3,174	24	0.76%	12	1.13%
34	New Delhi, India	5,660	101	1.78%	4	1.86%
35	Bucharest, Romania	2,470	13	0.53%	9	0.89%
TOTAL		180,584	1,624	0.90%	1,593	1.78%

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**2010 Adverse Analytical Findings and Atypical Findings
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Table B2 Non-Olympic Sports Results per Laboratory

	Laboratory	N Samples	N Adverse Analytical Findings ¹	% Adverse Analytical Findings ¹	N Atypical Findings ²	% Total Findings ³
1	Sydney, Australia	3,510	35	1.00%	8	1.23%
2	Seibersdorf, Austria	672	35	5.21%	1	5.36%
3	Ghent, Belgium	1,205	87	7.22%	13	8.30%
4	Rio de Janeiro, Brazil	89	15	16.85%	-	16.85%
5	Montreal, Canada	5,686	70	1.23%	11	1.42%
6	Beijing, China	1,360	17	1.25%	2	1.40%
7	Bogota, Colombia	420	17	4.05%	-	4.05%
8	Havana, Cuba	224	4	1.79%	5	4.02%
9	Prague, Czech Republic	278	8	2.88%	8	5.76%
10	Helsinki, Finland	795	14	1.76%	7	2.64%
11	Paris, France	2,363	80	3.39%	41	5.12%
12	Cologne, Germany	1,792	63	3.52%	3	3.68%
13	Dresden, Germany	749	9	1.20%	-	1.20%
14	London, UK	2,243	21	0.94%	2	1.03%
15	Athens, Greece	154	-	0.00%	-	0.00%
16	Rome, Italy	699	14	2.00%	14	4.01%
17	Tokyo, Japan	1,560	8	0.51%	2	0.64%
18	Seoul, Korea	1,184	26	2.20%	8	2.87%
19	Penang, Malaysia	90	7	7.78%	2	10.00%
20	Oslo, Norway	795	26	3.27%	11	4.65%
21	Warsaw, Poland	357	14	3.92%	12	7.28%
22	Lisbon, Portugal	646	17	2.63%	3	3.10%
23	Bloemfontein, South Africa	1,047	20	1.91%	8	2.67%
24	Moscow, Russia	1,781	48	2.70%	26	4.15%
25	Barcelona, Spain	230	20	8.70%	5	10.87%
26	Madrid, Spain	1,148	42	3.66%	42	7.32%
27	Stockholm, Sweden	1,212	23	1.90%	24	3.88%
28	Lausanne, Switzerland	475	7	1.47%	2	1.89%
29	Bangkok, Thailand	588	7	1.19%	1	1.36%
30	Tunis, Tunisia	264	11	4.17%	-	4.17%
31	Ankara, Turkey	481	12	2.49%	-	2.49%
32	Los Angeles, USA	30,696	201	0.65%	134	1.09%
33	Salt Lake City, USA	10,831	74	0.68%	30	0.96%
34	New Delhi, India	1,363	98	7.19%	-	7.19%
35	Bucharest, Romania	696	16	2.30%	10	3.74%
	TOTAL	77,683	1,166	1.50%	435	2.06%

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2010 Adverse Analytical Findings and Atypical Findings Reported by Accredited Laboratories

Table C

Olympic Sport Sample Analysis

Sport	Total Samples per Sport	A Sample Adverse Analytical Findings ¹	A Sample Atypical Findings ²	A Sample Total Findings ³	% Adverse Analytical Findings ¹
Aquatics	13,138	90	65	155	0.69%
Archery	1,156	17	4	21	1.47%
Athletics	25,013	196	242	438	0.78%
Badminton	1,250	3	2	5	0.24%
Basketball	9,575	139	62	201	1.45%
Biathlon	1,967	-	18	18	0.00%
Bobsleigh	1,214	2	17	19	0.16%
Boxing	3,874	75	35	110	1.94%
Canoe / Kayak	3,726	15	35	50	0.40%
Curling	477	3	5	8	0.63%
Cycling	21,427	254	359	613	1.19%
Equestrian	723	12	5	17	1.66%
Fencing	1,916	8	20	28	0.42%
Football	30,398	146	257	403	0.48%
Gymnastics	2,670	14	19	33	0.52%
Handball	4,141	37	30	67	0.89%
Hockey	2,275	30	27	57	1.32%
Ice Hockey	5,370	68	63	131	1.27%
Judo	4,068	46	28	74	1.13%
Luge	434	-	3	3	0.00%
Modern Pentathlon	569	4	2	6	0.70%
Rowing	4,424	10	26	36	0.23%
Sailing	795	6	11	17	0.75%
Shooting	2,960	16	9	25	0.54%
Skating	3,660	10	14	24	0.27%
Skiing	5,332	38	47	85	0.71%
Table Tennis	985	11	8	19	1.12%
Taekwondo	1,556	11	9	20	0.71%
Tennis	3,638	17	21	38	0.47%
Triathlon	3,676	40	46	86	1.09%
Volleyball	4,750	42	33	75	0.88%
Weightlifting	8,316	201	46	247	2.42%
Wrestling	5,111	63	25	88	1.23%
Total	180,584	1,624	1,593	3,217	0.90%

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³ Includes Adverse Analytical Findings and Atypical Findings

2010 Adverse Analytical Findings and Atypical Findings Reported by Accredited Laboratories

Table D1

Sample Analysis in IOC recognized Sports

Sport	Total per Sport	Adverse Analytical Findings ¹	Atypical Findings ²	A Sample Total Findings ³	% Adverse Analytical Findings ¹
Air Sports	97	3	-	3	3.09%
Bandy	199	1	3	4	0.50%
Baseball	18,402	128	89	217	0.70%
Baseball/Softball ⁴	302	6	6	12	1.99%
Billiard Sports	330	14	1	15	4.24%
Boules	304	13	8	21	4.28%
Bowling	347	2	2	4	0.58%
Bridge	50	3	-	3	6.00%
Chess	159	2	2	4	1.26%
Cricket	943	2	1	3	0.21%
Dance Sport	405	3	1	4	0.74%
Floorball	523	5	5	10	0.96%
Golf	1,619	33	12	45	2.04%
Karate	1,078	10	7	17	0.93%
Korfball	86	-	1	1	0.00%
Life Saving	331	3	-	3	0.91%
Motorcycle Racing	482	20	5	25	4.15%
Mountaineering and Climbing	239	2	3	5	0.84%
Netball	363	3	-	3	0.83%
Orienteering	462	3	4	7	0.65%
Pelote Basque	254	3	8	11	1.18%
Polo	3	-	-	-	0.00%
Powerboating	211	-	-	-	0.00%
Racquetball	32	-	-	-	0.00%
Rollersports	843	18	4	22	2.14%
Rugby ⁵	5,618	78	58	136	1.39%
Softball	1,012	7	1	8	0.69%
Sport Climbing	214	1	2	3	0.47%
Squash	559	7	11	18	1.25%
Sumo	145	2	6	8	1.38%
Surfing	129	2	1	3	1.55%
Tug of War	119	-	3	3	0.00%
Underwater Sports	401	3	3	6	0.75%
Water Skiing	201	2	-	2	1.00%
Wushu	298	5	2	7	1.68%
TOTAL	36,760	384	249	633	1.04%

Table D2

Sample Analysis in Paralympic Sports

Sport	Total per Sport	Adverse Analytical Findings ¹	Atypical Findings ²	A Sample Total Findings*	% Adverse Analytical Findings ¹
Paralympic Sports ⁶	1,635	17	6	23	1.04%

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³ Includes Adverse Analytical Findings and Atypical Findings

⁴ "Baseball/Softball" was designated on Doping Control Form and therefore unable to assign by single sport or federation.

⁵ Includes Samples noted as "Rugby" and "Rugby Union".

2010 Adverse Analytical Findings and Atypical Findings Reported by Accredited Laboratories

Table D3

Sample Analysis in other Sports

Sport	Total per Sport	Adverse Analytical Findings ¹	Atypical Findings ²	A Sample Total Findings ³	% Adverse Analytical Findings ¹
Aikido	4	-	-	-	0.00%
American Football	24,225	160	85	245	0.66%
Bodybuilding and Fitness	1,371	248	19	267	18.09%
Casting	42	2	1	3	4.76%
Darts	74	2	-	2	2.70%
Dragon Boat	214	1	-	1	0.47%
Draughts	-	-	-	-	0.00%
Fistball	3	-	-	-	0.00%
Flying Disc	-	-	-	-	-
Go	-	-	-	-	0.00%
Ju-Jitsu	90	6	-	6	6.67%
Kendo	16	-	-	-	0.00%
Kickboxing	342	17	6	23	4.97%
Minigolf	61	2	-	2	3.28%
Muaythai	111	9	-	9	8.11%
Powerlifting	2,786	136	29	165	4.88%
Sambo	348	23	4	27	6.61%
Sepaktakraw	183	1	-	1	0.55%
Sleddog	27	1	-	1	3.70%
Soft Tennis	105	1	-	1	0.95%
Sports Fishing	92	-	-	-	-
TOTAL	30,094	609	144	753	2.02%

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**2010 Adverse Analytical Findings and Atypical Findings
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Table E Number of Prohibited Substances Identified in Each Drug Class
(All Sports)

Substance Group	Number*	% of all reported findings*
S1. Anabolic Agents	3,374	60.8%
S6. Stimulants	574	10.3%
S8. Cannabinoids	533	9.6%
S5. Diuretics and Other Masking Agents	396	7.1%
S9. Glucocorticosteroids	234	4.2%
S3. Beta-2 Agonists	209	3.8%
S2. Hormones and Related Substances	86	1.6%
S4. Hormone Antagonists and Modulators	75	1.4%
P2. Beta-Blockers	30	0.5%
S7. Narcotics	20	0.4%
P1. Alcohol	9	0.2%
M2. Chemical and Physical Manipulation	6	0.1%
M1. Enhancement of Oxygen Transfer	-	0.0%
TOTAL	5,546	

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**2010 Adverse Analytical Findings and Atypical Findings
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Table F Substances Identified in Each Drug Class (All Sports)

S1.1. Anabolic Agents - AAF	Occurrences	% within drug class
Stanozolol	337	10.0%
Nandrolone	250	7.4%
Methandienone	156	4.6%
Elevated TE ratio	128	3.8%
Boldenone	81	2.4%
Drostanolone	49	1.5%
Metenolone	40	1.2%
Mesterolone	32	0.9%
Trenbolone	26	0.8%
Methyltestosterone	18	0.5%
Oxandrolone	18	0.5%
Dehydrochlormethyltestosterone	16	0.5%
Elevated TE ratio (IRMS exogenous)	16	0.5%
IRMS Exogenous	13	0.4%
Methasterone	12	0.4%
Oxymetholone	11	0.3%
9(10) dehydronandrolone	7	0.2%
19-norandrostenedione	6	0.2%
Elevated Androsterone	4	0.1%
Clostebol	3	0.1%
1-androstenedione	3	0.1%
Androsterone and Etiocholanolone (IRMS exogenous)	3	0.1%
Oxymesterone	2	0.1%
Desoxymethyltestosterone	2	0.1%
Elevated Testosterone	2	0.1%
Boldione	2	0.1%
Mestanolone	2	0.1%
Elevated Etiocholanolone	1	0.0%
Prasterone (IRMS exogenous)	1	0.0%
subtotal*	1,241	

S1.1. Anabolic Agents - ATF	Occurrences	% within drug class
Testosterone (TE ratio)	1,884	55.8%
Prasterone (DHEA)	79	2.3%
Boldenone	16	0.5%
Androsterone	12	0.4%
Epitestosterone	6	0.2%
Nandrolone metabolite(s)	5	0.1%
Elevated Testosterone	4	0.1%
Atypical Profile	3	0.1%
19-norandrostenedione	2	0.1%
Etiocholanolone	2	0.1%
Dihydrotestosterone	1	0.0%
subtotal*	2,014	

S.1.2 Other Anabolic Agents	Occurrences	% within drug class
Clenbuterol	116	3.4%
Andarine	2	0.1%
Tibolone	1	0.0%
subtotal*	119	

S.1. All Anabolic Agents	Occurrences
TOTAL*	3,374

¹ Reporting of an Endogenous AAS may be due to detection of a concentration outside normal reference ranges and/or establishment of an exogenous source by GC/C/IRMS.

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**2010 Adverse Analytical Findings and Atypical Findings
Reported by Accredited Laboratories**

Table F

(cont'd)

Substances Identified in Each Drug Class (All Sports)

S2. Hormones and Related Substances	Occurrences	% within drug class
Erythropoetin (EPO)	36	41.9%
Gonadotrophins (hCG)	33	38.4%
Erythropoetin (Darbepoetin)	8	9.3%
Gonadotrophins (LH)	5	5.8%
Growth Hormone (hGH)	3	3.5%
Mircera (CERA)	1	1.2%
TOTAL*	86	

S3. Beta-2 Agonists	Occurrences	% within drug class
Terbutaline	111	53.1%
Formoterol	78	37.3%
Salbutamol	9	4.3%
Salmeterol	6	2.9%
Fenoterol	5	2.4%
TOTAL*	209	

S4. Hormone Antagonists and Modulators	Occurrences	% within drug class
Tamoxifen	22	29.3%
Clomiphene	15	20.0%
Androst-1,4,6-triene-3,17-dione (ATD)	12	16.0%
Anastrozole	11	14.7%
Letrozole	6	8.0%
Formestane	6	8.0%
6a-androstenedione	2	2.7%
Exemestane	1	1.3%
TOTAL*	75	

S5. Diuretics and Other Masking Agents	Occurrences	% within drug class
Furosemide	152	38.4%
Hydrochlorothiazide	120	30.3%
Canrenone	27	6.8%
Chlorothiazide	25	6.3%
Amiloride	13	3.3%
Acetazolamide	12	3.0%
Triamterene	8	2.0%
Indapamide	7	1.8%
Chlortalidone	7	1.8%
Hydroxyethyl starch (HES)	7	1.8%
Torsemide	6	1.5%
Althiazide	3	0.8%
Probenecid	2	0.5%
Bumetanide	2	0.5%
Spironolactone	2	0.5%
Thiazide	2	0.5%
Clopamide	1	0.3%
TOTAL *	396	

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**2010 Adverse Analytical Findings and Atypical Findings
Reported by Accredited Laboratories**

Table F Substances Identified in Each Drug Class (All Sports)

(cont'd)

S6. Stimulants	Occurrences	% within drug class
Methylhexaneamine (dimethylpentylamine)	123	21.4%
Amphetamine	112	19.5%
Methylphenidate	73	12.7%
Cocaine	65	11.3%
Ephedrine	32	5.6%
Mephentermine	32	5.6%
Sibutramine	25	4.4%
Pseudoephedrine	17	3.0%
Heptaminol	12	2.1%
4-phenylpiracetam (carphedon)	10	1.7%
Modafinil	7	1.2%
Oxilofrine	7	1.2%
Methamphetamine (D-)	6	1.0%
D-Amphetamine	5	0.9%
Phentermine	5	0.9%
Tuaminoheptane	5	0.9%
Cathine	4	0.7%
Nikethamide	4	0.7%
Methylenedioxymethamphetamine	4	0.7%
Isometheptene	3	0.5%
Levmetamphetamine	3	0.5%
Pholedrine	3	0.5%
Methamphetamine	3	0.5%
Parahydroxyamphetamine	2	0.3%
Fenproporex	2	0.3%
beta-methylethylamine (2-phenylpropan-1-amine)	2	0.3%
Etamivan	1	0.2%
Fenetylline	1	0.2%
Phenmetrazine	1	0.2%
Methylephedrine	1	0.2%
Selegiline	1	0.2%
Crotetamide	1	0.2%
Cropamide	1	0.2%
4-methylmethcathinone (mephedrone)	1	0.2%
TOTAL*	574	

S7. Narcotics	Occurrences	% within drug class
Morphine	6	30.0%
Oxycodone	3	15.0%
Methadone	2	10.0%
Hydromorphone	2	10.0%
Buprenorphine	2	10.0%
Oxymorphone	1	5.0%
Diamorphone	1	5.0%
Fentanyl	1	5.0%
Hydrocodone	1	5.0%
Pentazocine	1	5.0%
TOTAL*	20	

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**2010 Adverse Analytical Findings and Atypical Findings
Reported by Accredited Laboratories**

Table F Substances Identified in Each Drug Class (All Sports)

(cont'd)

S8. Cannabinoids	Occurrences	% within drug class
THC (11-nor-9-carboxy-delta9-tetrahydrocannabinol)	532	99.8%
Cannabinimimetics (Spice)	1	0.2%
TOTAL*	533	

S9. Glucocorticosteroids	Occurrences	% within drug class
Budesonide	111	47.4%
Prednisolone + Prednisone	39	16.7%
Betamethasone	27	11.5%
Prednisolone	16	6.8%
Prednisone	9	3.8%
Dexamethasone	8	3.4%
Methylprednisolone	7	3.0%
Triamcinolone Acetonide	7	3.0%
Triamcinolone	6	2.6%
Deflazacort	3	1.3%
Fluticasone propionate	1	0.4%
TOTAL*	234	

P1. Alcohol	Occurrences	% within drug class
Alcohol	9	100.0%
TOTAL*	9	

P2. Beta-Blockers	Occurrences	% within drug class
Propranolol	10	33.3%
Bisoprolol	6	20.0%
Metoprolol	4	13.3%
Atenolol	4	13.3%
Nadolol	2	6.7%
Acebutolol	2	6.7%
Carvedilol	1	3.3%
Sotalol	1	3.3%
TOTAL*	30	

M2. Chemical and Physical Manipulation	Occurrences	% within drug class
Manipulation	6	100.0%
TOTAL*	6	

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2010 Adverse Analytical Findings and Atypical Findings Reported by Accredited Laboratories

Table G Total Laboratory Adverse Analytical Findings* and Atypical Findings* per Drug Class (All Sports)

Laboratory	S1. Anabolic Agents	S2. Peptide Hormones, Growth Factors and Related Substances	S3. Beta-2 Agonists	S4. Hormone Antagonists and Modulators	S5. Diuretics and Other Masking Agents	S6. Stimulants	S7. Narcotics	S8. Cannabinoids	S9. Glucocorticosteroids	P1. Alcohol	P2. Beta-Blockers	M2. Chemical and Physical Manipulation	Total Findings per Lab	% of total Findings
Sydney, Australia	33	-	1	2	3	26	-	8	7	-	-	-	80	1.4%
Seibersdorf, Austria	79	3	13	4	23	13	1	13	7	-	1	-	157	2.8%
Ghent, Belgium	228	3	20	5	18	38	2	53	5	-	2	-	374	6.7%
Rio de Janeiro, Brazil	16	-	-	2	16	20	-	2	1	-	-	-	57	1.0%
Montreal, Canada	128	9	9	6	24	59	-	79	10	-	1	1	326	5.9%
Beijing, China	55	2	4	4	16	4	2	1	2	-	1	-	91	1.6%
Bogota, Colombia	60	2	-	5	15	12	-	1	-	-	-	-	95	1.7%
Havana, Cuba	34	-	1	-	3	4	-	1	-	-	-	-	43	0.8%
Prague, Czech Republic	45	2	2	1	2	3	3	4	-	-	-	-	62	1.1%
Helsinki, Finland	54	-	3	-	6	4	-	2	2	-	-	-	71	1.3%
Paris, France	268	17	7	4	18	34	-	102	66	-	6	-	522	9.4%
Cologne, Germany	164	5	1	2	18	35	-	14	3	-	2	4	248	4.5%
Dresden, Germany	6	2	1	-	7	2	-	6	2	-	1	-	27	0.5%
London, UK	26	1	2	3	7	15	3	4	-	-	-	-	61	1.1%
Athens, Greece	19	1	-	-	-	4	-	1	-	-	-	-	25	0.5%
Rome, Italy	228	10	37	-	14	17	2	20	37	-	1	-	366	6.6%
Tokyo, Japan	12	1	1	2	3	2	-	-	-	-	-	-	21	0.4%
Seoul, Korea	34	-	3	-	25	12	-	-	3	-	2	-	79	1.4%
Penang, Malaysia	16	-	-	-	1	7	-	1	2	-	-	-	27	0.5%
Oslo, Norway	67	-	5	1	3	13	1	12	10	9	1	-	122	2.2%
Warsaw, Poland	95	-	-	-	8	13	-	5	-	-	-	-	121	2.2%
Lisbon, Portugal	74	6	-	2	8	13	-	22	2	-	1	-	128	2.3%
Bloemfontein, S Africa	39	-	2	-	13	9	-	4	7	-	-	-	74	1.3%
Moscow, Russia	298	-	1	-	48	20	-	17	-	-	1	1	386	7.0%
Barcelona, Spain	81	1	24	5	10	5	-	5	8	-	-	-	139	2.5%
Madrid, Spain	315	7	21	-	18	17	5	30	5	-	1	-	419	7.6%
Stockholm, Sweden	101	-	35	7	1	12	-	7	30	-	1	-	194	3.5%
Lausanne, Switzerland	65	6	2	-	2	11	1	11	5	-	-	-	103	1.9%
Bangkok, Thailand	12	-	-	-	11	9	-	3	-	-	-	-	35	0.6%
Tunis, Tunisia	34	-	-	-	6	1	-	4	-	-	-	-	45	0.8%
Ankara, Turkey	44	-	1	-	10	2	-	4	2	-	-	-	63	1.1%
Los Angeles, USA	335	4	12	17	15	57	-	69	9	-	6	-	524	9.4%
Salt Lake City, USA	93	1	-	1	4	26	-	20	3	-	-	-	148	2.7%
New Delhi, India	179	2	1	2	17	48	-	4	6	-	-	-	259	4.7%
Bucharest, Romania	37	1	-	-	3	7	-	4	-	-	2	-	54	1.0%
TOTAL PER DRUG CLASS	3,374	86	209	75	396	574	20	533	234	9	30	6	5,546	
% of Drug Class	60.8%	1.6%	3.8%	1.4%	7.1%	10.3%	0.4%	9.6%	4.2%	0.2%	0.5%	0.1%		

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2010 Blood Samples Analyzed and Reported by Accredited Laboratories

Table H Blood Analyses per Laboratory

Laboratory	Athlete Biological Passport Samples	hGH ¹ (Growth Hormone)			HBT ² (Homologous Blood Transfusion)			CERA ³ (Continuous Erythropoietin Receptor Activator)			HBOCs ⁴ (haemoglobin-based oxygen carriers)		
		Total Samples	AAF	% adverse	Total Samples	AAF	% adverse	Total Samples	AAF	% adverse	Total Samples	AAF	% adverse
1 Sydney, Australia	93	78	-	0.0%	-	-	-	5	-	0.0%	6	-	0.0%
2 Seibersdorf, Austria	185	253	-	0.0%	-	-	-	74	-	0.0%	-	-	-
3 Ghent, Belgium	468	-	-	-	16	-	0.0%	-	-	-	-	-	-
4 Rio de Janeiro, Brazil	n/ap	-	-	-	-	-	-	-	-	-	-	-	-
5 Montreal, Canada	394	484	1	0.2%	174	-	0.0%	367	-	0.0%	142	-	0.0%
6 Beijing, China	-	526	-	0.0%	98	-	0.0%	122	-	0.0%	87	-	0.0%
7 Bogota, Colombia	n/ap	-	-	-	-	-	-	-	-	-	-	-	-
8 Havana, Cuba	n/ap	-	-	-	-	-	-	-	-	-	-	-	-
9 Prague, Czech Republic	n/ap	84	1	1.2%	-	-	-	-	-	-	-	-	-
10 Helsinki, Finland	n/ap	74	-	0.0%	-	-	-	-	-	-	-	-	-
11 Paris, France	-	59	-	0.0%	-	-	-	408	1	0.2%	26	-	0.0%
12 Cologne, Germany	812	162	1	0.6%	48	-	0.0%	106	-	0.0%	58	-	0.0%
13 Dresden, Germany	587	98	-	0.0%	-	-	-	128	-	0.0%	-	-	-
14 London, UK	171	153	-	0.0%	-	-	-	-	-	-	-	-	-
15 Athens, Greece	n/ap	-	-	-	-	-	-	-	-	-	-	-	-
16 Rome, Italy	26	459	-	0.0%	8	-	0.0%	17	-	0.0%	628	-	0.0%
17 Tokyo, Japan	3	-	-	-	-	-	-	-	-	-	-	-	-
18 Seoul, Korea	-	30	-	0.0%	-	-	-	-	-	-	-	-	-
19 Penang, Malaysia	n/ap	-	-	-	-	-	-	-	-	-	-	-	-
20 Oslo, Norway	143	27	-	0.0%	-	-	-	20	-	0.0%	-	-	-
21 Warsaw, Poland	n/ap	13	-	0.0%	-	-	-	-	-	-	-	-	-
22 Lisbon, Portugal	159	184	-	0.0%	-	-	-	76	-	0.0%	-	-	-
23 Bloemfontein, South Africa	39	26	-	0.0%	-	-	-	-	-	-	-	-	-
24 Moscow, Russia	n/ap	-	-	-	-	-	-	-	-	-	-	-	-
25 Barcelona, Spain	450	19	-	0.0%	1	-	0.0%	-	-	-	-	-	-
26 Madrid, Spain	673	1	-	0.0%	-	-	-	7	-	0.0%	-	-	-
27 Stockholm, Sweden	n/ap	23	-	0.0%	-	-	-	-	-	-	-	-	-
28 Lausanne, Switzerland	2,157	179	-	0.0%	129	-	0.0%	278	-	0.0%	38	-	0.0%
29 Bangkok, Thailand	n/ap	-	-	-	-	-	-	-	-	-	-	-	-
30 Tunis, Tunisia	n/ap	-	-	-	-	-	-	-	-	-	-	-	-
31 Ankara, Turkey	n/ap	-	-	-	-	-	-	-	-	-	-	-	-
32 Los Angeles, USA	n/ap	-	-	-	-	-	-	-	-	-	-	-	-
33 Salt Lake City, USA	173	382	-	0.0%	-	-	-	-	-	-	-	-	-
34 New Delhi, India	77	111	-	0.0%	96	-	0.0%	74	-	0.0%	50	-	0.0%
35 Bucharest, Romania	n/ap	-	-	-	-	-	-	-	-	-	-	-	-
TOTALS	6,610	3425	3	0.1%	570	0	0.0%	1682	1	0.1%	1035	0	0.0%

¹ Prohibited List, S2. Peptide Hormones, Growth Factors and Related Substances, section 5.

² Prohibited List, M1. Enhancement of Oxygen Transfer, section 1. Blood Doping

³ Prohibited List, S2. Peptide Hormones, Growth Factors and Related Substances, section 1. methoxy polyethylene glycol-epoetin beta (CERA)

⁴ Prohibited List, M1. Enhancement of Oxygen Transfer, section 2. modified haemoglobin products

2010 Blood Samples Analyzed and Reported by Accredited Laboratories

Total Blood Samples Analyzed per Laboratory

Sport	Athlete Biological Passport Samples*	Growth Hormone (GH) ¹			HBT ² (Homologous Blood Transfusion)			CERA ³ (methoxy polyethylene glycol-epoetin)			HBOC ⁴ (haemoglobin-based oxygen carriers)		
		Total Samples	AAF	% adverse	Total Samples	AAF	% adverse	Total Samples	AAF	% adverse	Total Samples	AAF	% adverse
American Football	-	37	1	2.7%	-	-	-	-	-	-	-	-	-
Aquatics	50	186	1	0.5%	34	-	-	91	-	-	33	-	-
Athletics	1,011	552	1	0.2%	112	-	-	309	1	0.3%	107	-	-
Baseball	-	6	-	-	-	-	-	-	-	-	5	-	-
Baseball/Softball	-	5	-	-	-	-	-	-	-	-	-	-	-
Basketball	-	34	-	-	-	-	-	1	-	-	-	-	-
Biathlon	75	83	-	-	34	-	-	118	-	-	18	-	-
Bobsleigh	18	95	-	-	8	-	-	12	-	-	8	-	-
Bodybuilding	-	26	-	-	2	-	-	-	-	-	-	-	-
Boxing	-	60	-	-	-	-	-	10	-	-	-	-	-
Canoe / Kayak	-	129	-	-	9	-	-	14	-	-	6	-	-
Casting	-	2	-	-	-	-	-	-	-	-	-	-	-
Cycling	5,330	483	-	-	169	-	-	470	-	-	125	-	-
Dragon Boat	-	6	-	-	-	-	-	-	-	-	-	-	-
Football	-	359	-	-	-	-	-	88	-	-	522	-	-
Handball	-	4	-	-	-	-	-	-	-	-	-	-	-
Hockey	-	12	-	-	-	-	-	-	-	-	-	-	-
Ice Hockey	-	93	-	-	-	-	-	12	-	-	-	-	-
Judo	-	39	-	-	-	-	-	-	-	-	-	-	-
Kabaddi	11	11	-	-	-	-	-	-	-	-	-	-	-
Luge	-	10	-	-	-	-	-	-	-	-	-	-	-
Marathon Swimming	-	-	-	-	3	-	-	-	-	-	3	-	-
Modern Pentathlon	-	4	-	-	2	-	-	-	-	-	10	-	-
Orienteering	-	-	-	-	-	-	-	2	-	-	-	-	-
Paralympic	-	41	-	-	33	-	-	32	-	-	33	-	-
Pelote Basque	-	2	-	-	-	-	-	2	-	-	2	-	-
Powerlifting	-	47	-	-	-	-	-	42	-	-	-	-	-
Powerpress	-	6	-	-	-	-	-	-	-	-	-	-	-
Rollersports	-	-	-	-	-	-	-	-	-	-	4	-	-
Rowing	151	94	-	-	27	-	-	27	-	-	17	-	-
Rugby	-	74	-	-	-	-	-	40	-	-	-	-	-
Rugby Football	-	4	-	-	-	-	-	-	-	-	-	-	-
Rugby league	-	51	-	-	-	-	-	-	-	-	-	-	-
Rugby Union	-	115	-	-	-	-	-	30	-	-	30	-	-
Sailing	-	-	-	-	-	-	-	2	-	-	-	-	-
Shooting	-	3	-	-	-	-	-	-	-	-	-	-	-
Skating	39	108	-	-	49	-	-	90	-	-	47	-	-
Skiing	39	209	-	-	52	-	-	176	-	-	37	-	-
Sport Climbing	-	2	-	-	-	-	-	-	-	-	-	-	-
Taekwondo	-	14	-	-	-	-	-	1	-	-	-	-	-
Tennis	-	26	-	-	1	-	-	-	-	-	-	-	-
Triathlon	335	107	-	-	32	-	-	99	-	-	20	-	-
Unknown	-	-	-	-	-	-	-	2	-	-	-	-	-
Volleyball	-	33	-	-	-	-	-	-	-	-	-	-	-
Weightlifting	4	203	-	-	3	-	-	12	-	-	8	-	-
Wrestling	-	50	-	-	-	-	-	-	-	-	-	-	-
Totals	7,063	3425	3	0.09%	570	0	0.00%	1682	1	0.06%	1035	0	0.00%

* 453 samples were reported by non-WADA Laboratories in early 2010; however those labs are no longer operating within the Athlete Biological Passport program.

¹ Prohibited List, S2, Peptide Hormones, Growth Factors and Related Substances, section 5.

² Prohibited List, M1, Enhancement of Oxygen Transfer, section 1, Blood Doping

³ Prohibited List, S2, Peptide Hormones, Growth Factors and Related Substances, section 1, methoxy polyethylene glycol-epoetin beta (CERA);

⁴ Prohibited List, M1, Enhancement of Oxygen Transfer, section 2, modified haemoglobin products