

**GOOD GAME!**<sup>®</sup>  
NEW DEAL FOR SPORT

# Report REF-EVAL<sup>®</sup> Level 2

**Atlético Mineiro 1-0 Botafogo**  
**2023/09/16**

**Competition: Brazil Serie A 2023**

**Report Publication Date: 2023/11/15**

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## **GLOSSARY**

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CRD: Correct Referee Decision

IRD: Incorrect Referee Decision

AI: Artificial Intelligence

## **1-REF-EVAL<sup>®</sup> METHOD**

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The REF-EVAL<sup>®</sup> method is the exclusive property of the GOOD GAME!<sup>®</sup> company. The REF-EVAL<sup>®</sup> method uses multifactorial analysis of player physiological, biomechanical and tactical performance combined with all refereeing decisions.

The REF-EVAL<sup>®</sup> method, developed over 15 years of analysing players and referees performance data, provides more than 99% correct answers on all refereeing situations. The REF-EVAL<sup>®</sup> method leverages complex algorithms from artificial intelligence (AI) to identify all what are called IRD (Incorrect Referee Decision) to be opposed to CRD (Correct Referee Decision).

We then distinguish between IRD High, i.e. referee errors that directly influence the score (e.g. an invalid penalty whistled...) or the number of players (e.g. a red card not given...) and IRD Low, i.e. referee errors that do not directly influence the score (e.g. a foul not whistled...). In the same way we distinguish the CRD Low when the referee makes the right decision on a simple decision, from the CRD High when the referee makes a right decision on a complex situation (a penalty rightly whistled for example).

Furthermore the REF-EVAL<sup>®</sup> distinguish the unintentional IRD that occur in all football matches from intentional IRD to also identify potential match-fixing related to referees. The REF-EVAL<sup>®</sup> method is today the most advanced tool to secure competitions results and evaluate referees.

## 2-MATCH INFORMATION

### General Information

<b>Date</b>	2023/09/16	
<b>Time</b>	21:00	
<b>Country</b>	Brazil	
<b>City</b>	Belo Horizonte	
<b>Stadium</b>	Arena MRV	
<b>Field length (m)</b>	/	
<b>Field width (m)</b>	/	
	<b>Wind</b>	<b>Rain</b>
	/	/

### Referees

Position	NAME	First name
<b>Referee</b>	ABATTI ABEL	Ramon
<b>Assistant referee</b>	BRUNO RAPHAEL	Bruno
<b>Assistant referee</b>	AMERICANO LABES	Thiago
<b>Fourth official</b>	CANDIDO	Alves
<b>Video Assistant Referee</b>	GUARIZO FERREIRA DO AMARAL	Rodrigo
<b>Assistant Video Assistant Referee</b>	MAGNO LIMA CORDEIRO	Antonio



**Video Assistant Referee**

YES

## 3-REFEREEING SITUATIONS (from chrono)

First Half: 0 to 15min

ORDER	PERIOD	TYPE	VAR	TEAM CODE	CHRONO	VIDEO TIME	WHISTLED / NOT	DECISION	CRD/IRD* Type	CRD/IRD Classification	IRD team benefit
1	First Half	Start first half	No	Botafogo	000:00		Whistled	Correct		CRD Low	
2	First Half	Throw-in (for)	No	Botafogo	000:09		Whistled	Correct		CRD Low	
3	First Half	Other	No	Atlético Mineiro	000:53		Whistled	Correct		CRD Low	
4	First Half	Drop ball	No	Botafogo	001:15		Whistled	Correct		CRD Low	
5	First Half	Throw-in (for)	No	Botafogo	002:16		Whistled	Correct		CRD Low	
6	First Half	Throw-in (for)	No	Botafogo	002:26		Whistled	Correct		CRD Low	
7	First Half	Foul (from)	No	Atlético Mineiro	002:45		Whistled	Correct		CRD Low	
8	First Half	Throw-in (for)	No	Botafogo	003:10		Whistled	Correct		CRD Low	
9	First Half	Goal kick (for)	No	Atlético Mineiro	003:38		Whistled	Correct		CRD Low	
10	First Half	Goal kick (for)	No	Botafogo	004:44		Whistled	Correct		CRD Low	
11	First Half	Foul (from)	No	Botafogo	005:58		Whistled	Correct		CRD Low	
12	First Half	Offside (from)	No	Atlético Mineiro	006:45		Whistled	Correct		CRD Low	
13	First Half	Foul (from)	No	Botafogo	008:28		Not Whistled	Correct	Advantage	CRD Low	
14	First Half	Throw-in (for)	No	Atlético Mineiro	008:40		Whistled	Correct		CRD Low	
15	First Half	Foul (from)	No	Botafogo	009:22		Whistled	Correct		CRD Low	
16	First Half	Corner kick (for)	No	Atlético Mineiro	010:25		Whistled	Correct		CRD Low	
17	First Half	Other	No	Atlético Mineiro	010:39		Whistled	Correct		CRD Low	
18	First Half	Foul (from)	No	Botafogo	012:04		Not Whistled	Incorrect	Valid Foul Not Whistled (VFNW)	IRD Low	Botafogo
19	First Half	Foul (from)	No	Atlético Mineiro	012:23		Whistled	Correct		CRD Low	
20	First Half	Goal kick (for)	No	Atlético Mineiro	013:15		Whistled	Correct		CRD Low	
21	First Half	Other	No	Atlético Mineiro	013:18		Whistled	Correct		CRD Low	
22	First Half	Throw-in (for)	No	Botafogo	014:14		Whistled	Correct		CRD Low	
23	First Half	Foul (from)	No	Botafogo	014:57		Not Whistled	Correct	Advantage	CRD Low	

\*CRD(Correct Referee Decision) / IRD (Incorrect Referee Decision)

First Half: 15 to 30min

ORDER	PERIOD	TYPE	VAR	TEAM CODE	CHRONO	VIDEO TIME	WHISTLED / NOT	DECISION	CRD/IRD* Type	CRD/IRD Classification	IRD team benefit
24	First Half	Foul (from)	No	Atlético Mineiro	015:05		Whistled	Correct		CRD Low	
25	First Half	Foul (from)	No	Botafogo	018:26		Whistled	Correct		CRD Low	
26	First Half	Throw-in (for)	No	Botafogo	019:18		Whistled	Correct		CRD Low	
27	First Half	Throw-in (for)	No	Botafogo	019:55		Whistled	Correct		CRD Low	
28	First Half	Goal kick (for)	No	Atlético Mineiro	020:13		Whistled	Correct		CRD Low	
29	First Half	Foul (from)	No	Atlético Mineiro	021:08		Whistled	Correct		CRD Low	
30	First Half	Throw-in (for)	No	Botafogo	022:27		Whistled	Correct		CRD Low	
31	First Half	Foul (from)	No	Atlético Mineiro	023:35		Not Whistled	Incorrect	Valid Foul Not Whistled (VFNW)	IRD Low	Atlético Mineiro
32	First Half	Corner kick (for)	No	Atlético Mineiro	023:36		Whistled	Correct		CRD Low	
33	First Half	Offside (from)	No	Atlético Mineiro	024:18		Whistled	Correct		CRD Low	
34	First Half	Foul (from)	No	Atlético Mineiro	026:04		Whistled	Correct		CRD Low	
35	First Half	Goal kick (for)	No	Atlético Mineiro	026:59		Whistled	Correct		CRD Low	
36	First Half	Foul (from)	No	Botafogo	027:39		Whistled	Correct		CRD Low	
37	First Half	Yellow card (for)	No	Botafogo	027:45		Whistled	Correct		CRD Low	
38	First Half	Corner kick (for)	No	Atlético Mineiro	029:13		Whistled	Correct		CRD Low	
39	First Half	Goal kick (for)	No	Botafogo	029:43		Whistled	Correct		CRD Low	

\*CRD(Correct Referee Decision) / IRD (Incorrect Referee Decision)

First Half: 30min to half time

ORDER	PERIOD	TYPE	VAR	TEAM CODE	CHRONO	VIDEO TIME	WHISTLED / NOT	DECISION	CRD/IRD* Type	CRD/IRD Classification	IRD team benefit
40	First Half	Foul (from)	No	Botafogo	030:43		Whistled	Correct		CRD Low	
41	First Half	Yellow card (for)	No	Botafogo	030:43		Not Whistled	Incorrect	Valid Yellow Card Not Given (VYCNG)	IRD Low	Botafogo
42	First Half	Throw-in (for)	No	Atlético Mineiro	031:46		Whistled	Correct		CRD Low	
43	First Half	Foul (from)	No	Atlético Mineiro	032:24		Whistled	Correct		CRD Low	
44	First Half	Throw-in (for)	No	Botafogo	033:33		Whistled	Correct		CRD Low	
45	First Half	Goal kick (for)	No	Atlético Mineiro	034:00		Whistled	Correct		CRD Low	
46	First Half	Throw-in (for)	No	Botafogo	034:21		Whistled	Correct		CRD Low	
47	First Half	Throw-in (for)	No	Botafogo	035:22		Whistled	Correct		CRD Low	
48	First Half	Foul (from)	No	Botafogo	036:56		Whistled	Incorrect	Invalid Foul Whistled (IFW)	IRD Low	Atlético Mineiro
49	First Half	Foul (from)	No	Atlético Mineiro	038:06		Whistled	Correct		CRD Low	
50	First Half	Throw-in (for)	No	Atlético Mineiro	038:53		Whistled	Correct		CRD Low	
51	First Half	Corner kick (for)	No	Atlético Mineiro	039:41		Whistled	Correct		CRD Low	
52	First Half	Goal kick (for)	No	Botafogo	040:14		Whistled	Correct		CRD Low	
53	First Half	Throw-in (for)	No	Atlético Mineiro	041:08		Whistled	Correct		CRD Low	
54	First Half	Foul (from)	No	Atlético Mineiro	042:15		Whistled	Correct		CRD Low	
55	First Half	Foul (from)	No	Atlético Mineiro	044:44		Whistled	Correct		CRD Low	
56	First Half	Yellow card (for)	No	Atlético Mineiro	044:49		Whistled	Correct		CRD Low	
57	First Half	Corner kick (for)	No	Botafogo	046:39		Whistled	Correct		CRD Low	
58	First Half	Foul (from)	No	Botafogo	047:29		Whistled	Correct		CRD Low	
59	First Half	End first half	No	Botafogo	047:50		Whistled	Correct		CRD Low	

\*CRD(Correct Referee Decision) / IRD (Incorrect Referee Decision)

Second Half: 45 to 60min

ORDER	PERIOD	TYPE	VAR	TEAM CODE	CHRONO	VIDEO TIME	WHISTLED / NOT	DECISION	CRD/IRD* Type	CRD/IRD Classification	IRD team benefit
60	Second Half	Substitution (for)	No	Botafogo	045:00		Whistled	Not Assessed		CRD Low	
61	Second Half	Start second half	No	Atlético Mineiro	045:00		Whistled	Correct		CRD Low	
62	Second Half	Other	No	Botafogo	045:03		Whistled	Correct		CRD Low	
63	Second Half	Drop ball	No	Botafogo	045:45		Whistled	Correct		CRD Low	
64	Second Half	Throw-in (for)	No	Atlético Mineiro	046:11		Whistled	Correct		CRD Low	
65	Second Half	Foul (from)	No	Botafogo	046:28		Whistled	Correct		CRD Low	
66	Second Half	Foul (from)	No	Botafogo	047:02		Whistled	Correct		CRD Low	
67	Second Half	Foul (from)	No	Atlético Mineiro	048:34		Whistled	Correct		CRD Low	
68	Second Half	Offside (from)	No	Atlético Mineiro	050:05		Whistled	Correct		CRD Low	
69	Second Half	Goal kick (for)	No	Atlético Mineiro	051:03		Whistled	Correct		CRD Low	
70	Second Half	Foul (from)	No	Atlético Mineiro	052:12		Whistled	Correct		CRD Low	
71	Second Half	Goal kick (for)	No	Atlético Mineiro	053:09		Whistled	Correct		CRD Low	
72	Second Half	Corner kick (for)	No	Atlético Mineiro	056:42		Whistled	Correct		CRD Low	
73	Second Half	Foul (from)	No	Atlético Mineiro	057:35		Whistled	Correct		CRD Low	
74	Second Half	Corner kick (for)	No	Botafogo	059:52		Whistled	Correct		CRD Low	

\*CRD(Correct Referee Decision) / IRD (Incorrect Referee Decision)



Second Half: 60 to 75min

ORDER	PERIOD	TYPE	VAR	TEAM CODE	CHRONO	VIDEO TIME	WHISTLED / NOT	DECISION	CRD/IRD* Type	CRD/IRD Classification	IRD team benefit
75	Second Half	Foul (from)	No	Botafogo	060:20		Whistled	Correct		CRD Low	
76	Second Half	Other	No	Botafogo	060:24		Whistled	Correct		CRD Low	
77	Second Half	Foul (from)	No	Botafogo	062:31		Whistled	Not Assessed		CRD Low	
78	Second Half	Goal kick (for)	No	Botafogo	065:07		Whistled	Correct		CRD Low	
79	Second Half	Substitution (for)	No	Botafogo	065:32		Whistled	Correct		CRD Low	
80	Second Half	Substitution (for)	No	Botafogo	066:08		Whistled	Correct		CRD Low	
81	Second Half	Other	No	Atlético Mineiro	067:50		Whistled	Correct		CRD Low	
82	Second Half	Drop ball	No	Atlético Mineiro	068:44		Whistled	Correct		CRD Low	
83	Second Half	Foul (from)	No	Botafogo	068:56		Not Whistled	Incorrect	Valid Foul Not Whistled (VFNW)	IRD Low	Botafogo
84	Second Half	Foul (from)	No	Atlético Mineiro	069:28		Whistled	Correct		CRD Low	
85	Second Half	Foul (from)	No	Atlético Mineiro	070:52		Not Whistled	Correct	Advantage	CRD Low	
86	Second Half	Throw-in (for)	No	Atlético Mineiro	071:37		Whistled	Correct		CRD Low	
87	Second Half	Substitution (for)	No	Atlético Mineiro	071:50		Whistled	Correct		CRD Low	
88	Second Half	Foul (from)	No	Botafogo	072:47		Not Whistled	Correct	Advantage	CRD Low	
89	Second Half	Offside (from)	No	Atlético Mineiro	073:14		Whistled	Correct		CRD Low	
90	Second Half	Foul (from)	No	Botafogo	073:44		Whistled	Correct		CRD Low	
91	Second Half	Foul (from)	No	Atlético Mineiro	074:08		Whistled	Correct		CRD Low	
92	Second Half	Substitution (for)	No	Botafogo	074:27		Whistled	Correct		CRD Low	

\*CRD(Correct Referee Decision) / IRD (Incorrect Referee Decision)

Second Half: 75min to end second half

ORDER	PERIOD	TYPE	VAR	TEAM CODE	CHRONO	VIDEO TIME	WHISTLED / NOT	DECISION	CRD/IRD* Type	CRD/IRD Classification	IRD team benefit
93	Second Half	Throw-in (for)	No	Atlético Mineiro	075:08		Whistled	Correct		CRD Low	
94	Second Half	Other	No	Atlético Mineiro	075:48		Whistled	Correct		CRD Low	
95	Second Half	Throw-in (for)	No	Atlético Mineiro	075:40		Whistled	Correct		CRD Low	
96	Second Half	Throw-in (for)	No	Botafogo	076:31		Whistled	Correct		CRD Low	
97	Second Half	Foul (from)	No	Botafogo	077:16		Not Whistled	Incorrect	Valid Foul Not Whistled (VFNW)	IRD Low	Botafogo
98	Second Half	Goal kick (for)	No	Atlético Mineiro	078:38		Whistled	Correct		CRD Low	
99	Second Half	Goal kick (for)	No	Atlético Mineiro	080:12		Whistled	Correct		CRD Low	
100	Second Half	Goal (for)	No	Atlético Mineiro	080:46		Whistled	Correct		CRD Low	
101	Second Half	Goal kick (for)	No	Atlético Mineiro	083:48		Whistled	Correct		CRD Low	
102	Second Half	Throw-in (for)	No	Atlético Mineiro	084:29		Whistled	Correct		CRD Low	
103	Second Half	Substitution (for)	No	Botafogo	084:36		Whistled	Correct		CRD Low	
104	Second Half	Corner kick (for)	No	Botafogo	086:38		Whistled	Correct		CRD Low	
105	Second Half	Offside (from)	Permitted	Botafogo	088:10		Whistled	Incorrect	Invalid Offside Whistled (IOW)	IRD Low	Atlético Mineiro
106	Second Half	Goal canceled (for)	Permitted	Botafogo	088:10		Whistled	Incorrect	Valid Goal Canceled (VGC)	IRD High	Atlético Mineiro
107	Second Half	Substitution (for)	No	Atlético Mineiro	089:25		Whistled	Correct		CRD Low	
108	Second Half	Substitution (for)	No	Atlético Mineiro	089:59		Whistled	Correct		CRD Low	
109	Second Half	Foul (from)	No	Atlético Mineiro	090:23		Whistled	Correct		CRD Low	
110	Second Half	Yellow card (for)	No	Atlético Mineiro	090:23		Whistled	Correct		CRD Low	
111	Second Half	Throw-in (for)	No	Atlético Mineiro	091:24		Whistled	Correct		CRD Low	
112	Second Half	Throw-in (for)	No	Atlético Mineiro	092:17		Whistled	Correct		CRD Low	
113	Second Half	Throw-in (for)	No	Atlético Mineiro	092:43		Whistled	Correct		CRD Low	
114	Second Half	Goal kick (for)	No	Botafogo	094:13		Whistled	Correct		CRD Low	
115	Second Half	Foul (from)	No	Atlético Mineiro	094:29		Not Whistled	Incorrect	Valid Foul Not Whistled (VFNW)	IRD Low	Atlético Mineiro
116	Second Half	Goal kick (for)	No	Botafogo	094:46		Whistled	Correct		CRD Low	
117	Second Half	End second half	No	Atlético Mineiro	096:03		Whistled	Correct		CRD Low	

\*CRD(Correct Referee Decision) / IRD (Incorrect Referee Decision)

## 4-LIVE IRD & CRD High AI results

8810 IRD High: Valid Goal Canceled (VGC)

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VAR-ASSIST AI

Final result

GOAL VALIDATION REPORT - Download >>

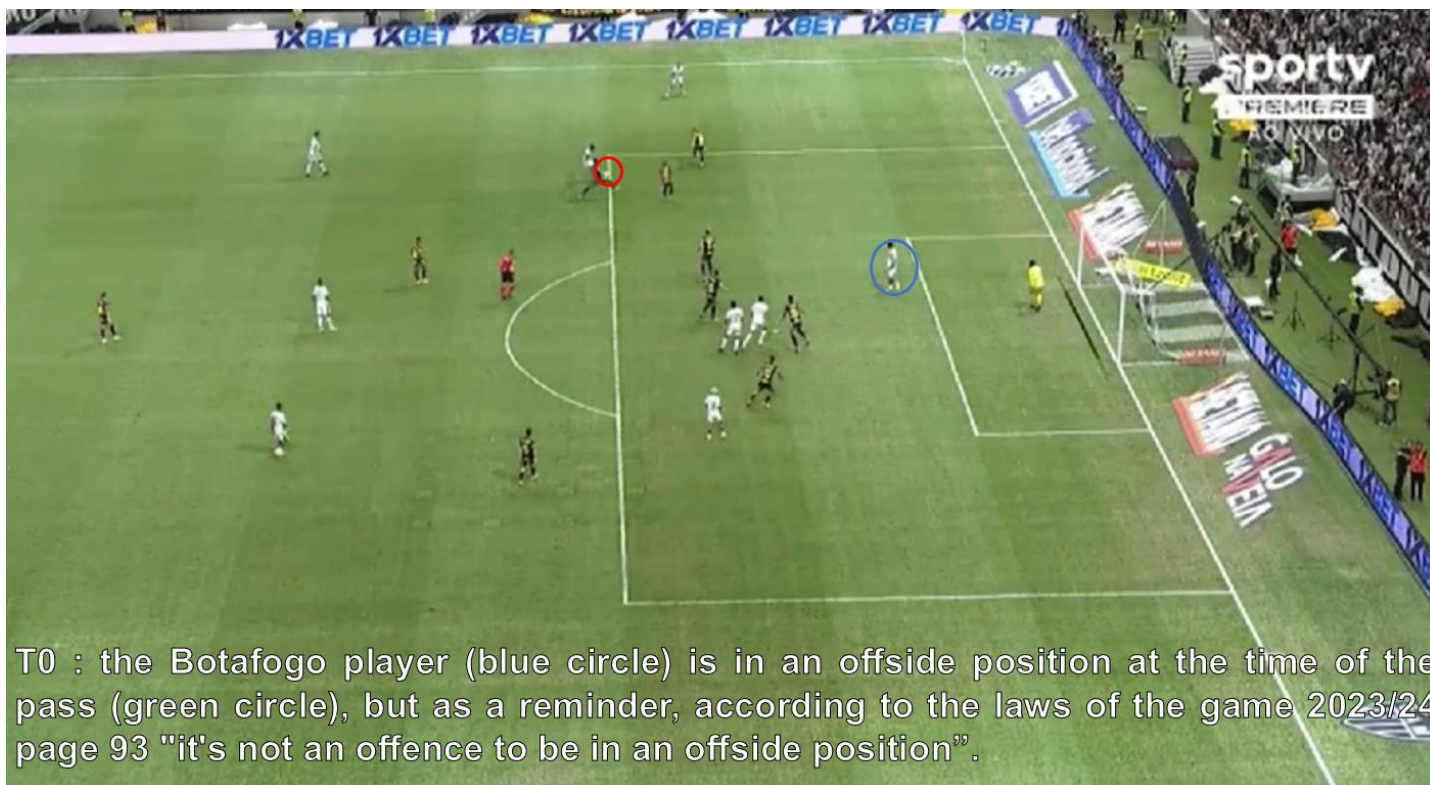
Back to the Menu >>

Restart Analysis >>

GOAL

GV3-4Y5N6N7N8N-G

Unique analysis AI code: GV3-4Y5N6N7N8N-G



T0 : the Botafogo player (blue circle) is in an offside position at the time of the pass (green circle), but as a reminder, according to the laws of the game 2023/24 page 93 "it's not an offence to be in an offside position".





## **5-REFEREEING DECISIONS ASSESSMENT**

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Half time note

/

Full time note

/

REFEREEING SITUATIONS	Total	%
Total number of refereeing situations	117	/
Whistled	107	91
Not whistled	10	9
Correct	106	91
Incorrect (IRD)	9	8
Not assessed	2	2

IRD Distribution	Total	%
Benefits for Atlético Mineiro	5	56
Benefits for Botafogo	4	44

IRD Atlético Mineiro	Total
Total number of IRD High with benefit	1
Total number of IRD Low with benefit	4
Total number of IRD High with deficit	0
Total number of IRD Low with deficit	4

IRD Distribution with benefits for Atlético Mineiro	Total
Reverse team	/
Valid goal canceled	1
Invalid goal accepted	/
Valid penalty not whistled	/
Invalid penalty whistled	/
Invalid penalty goal	/
Valid foul not whistled	3
Invalid foul whistled	1
Valid offside not whistled	/
Invalid offside whistled	1
Valid corner kick not whistled	/
Invalid corner kick whistled	/
Valid throw-in not whistled	/
Invalid throw-in whistled	/
Valid yellow card not given	/
Invalid yellow card given	/
Valid red card not given	/
Invalid red card given	/



IRD Botafogo	Total
Total number of IRD High with benefit	0
Total number of IRD Low with benefit	4
Total number of IRD High with deficit	1
Total number of IRD Low with deficit	4

IRD Distribution with benefits for Botafogo	Total
Reverse team	/
Valid goal canceled	/
Invalid goal accepted	/
Valid penalty not whistled	/
Invalid penalty whistled	/
Invalid penalty goal	/
Valid foul not whistled	3
Invalid foul whistled	/
Valid offside not whistled	/
Invalid offside whistled	/
Valid corner kick not whistled	/
Invalid corner kick whistled	/
Valid throw-in not whistled	/
Invalid throw-in whistled	/
Valid yellow card not given	1
Invalid yellow card given	/
Valid red card not given	/
Invalid red card given	/

## 6-CONCLUSION

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The presence of 1 IRD (Incorrect Referee Decision) High (with direct influence on the score and/or number of players) with benefits for Atlético Mineiro in the match between Atlético Mineiro and Botafogo on 2023/09/16, part of the Brazil Serie A 2023, has completely changed the official score and points for each team.

POINTS	OFFICIAL	REAL
Atlético Mineiro	3	1
Botafogo	0	1

RESULTS	OFFICIAL	REAL
Atlético Mineiro - Botafogo	1-0	1-1

Furthermore all the technical and scientific elements assessed and presented in this expert report show that the refereeing is NORMAL related to match-fixing.

On November 15, 2023,

SP, Ph.D.

