



# INJURY TIME





# SEASONS

2022/23  
2023/24





# INJURY TIME

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The Italian Footballers' Association (AIC) has launched initiatives aimed at raising cultural and sporting awareness regarding "Athlete Health" over the past two seasons.

During the scientific conferences organized in May [Rome - Acqua Acetosa] and October [Florence - FIGC Technical Center in Coverciano] 2023, a study involving Serie A players and technical staff members was presented.

The survey revealed that, in most cases, players and technical staff agree that a recovery period of 7 or more days is necessary to fully regain competitive fitness when an athlete plays 4 matches within 12 days.

The concept of "cumulative fatigue" (defined as the accumulation of various types of fatigue: physical, mental, etc.) was introduced at the conference. This highlighted that an athlete's performance is not only impacted by the physical exertion of the match itself but also by additional factors such as travel, psychological stress, media pressure, and interactions with fans.

In May 2024 [Rome - Italian Press Federation], AIC, in collaboration with the Coaches' Association, will promote another session to further investigate the influence of the "human factor" on athlete performance and the overall results of the club, under the theme "Sport and the Human Factor."

This occasion will specifically address the issue of the excessive number of so-called "back-to-back" fixtures (i.e., closely scheduled matches) and the necessity of better aligning national and international calendars.

The goal of these discussions is to focus on athlete well-being, emphasizing both their health and the value of their contribution to the sports entertainment product offered by professional football.

It is now widely recognized that the volume of sporting commitments has significantly increased in recent seasons, surpassing the threshold of 54–55 matches per season [including club and national team fixtures], which is the maximum recommended by the international sports community.

This escalation in the number of matches has been, and continues to be, the strategy employed by event organizers to meet the growing demand for entertainment from audiences and broadcasters.

Over the past two decades, "broadcasting rights" have become the primary revenue stream for club budgets and an essential tool for achieving the visibility required to strengthen brands. This visibility, in turn, drives commercial revenues derived from sponsorships, merchandising, and partnerships.

This redefinition of income sources has resulted in a transformation of the business model for top-tier clubs: evolving from providers of "sports products" to producers of "sport-entertainment".

However, increasing the quantity of events alone is insufficient to ensure a proportional increase in demand.

On the contrary, as evidenced in other industries, an oversupply tends to diminish demand, which eventually leads to a decline in revenues.

Audiences, increasingly sophisticated and discerning, alongside media stakeholders, demand a product that is differentiated, innovative, and of superior quality. This entails a focus on aspects such as greater "effective playing time," increased intensity, higher goal tallies, more frequent substitutions, and, broadly, a heightened level of sports entertainment.

Global trends indicate that revenue from broadcasting rights for the leading football leagues is experiencing contraction, particularly in domestic markets. This emphasizes the need for a strategic shift in how the sport is packaged and presented to maintain revenue growth and audience engagement.

As discussions continue regarding the potential for increasing the number of matches to broadcast or exploring innovative delivery methods, it becomes evident that relying solely on an increased volume of matches cannot serve as the primary strategy for sustaining the football system.

The entire business model of professional football hinges on its key stakeholders: the players.

These athletes are expected to consistently perform at an elite level, especially given that the product being marketed is a televised spectacle of ever-increasing quality, with escalating demands for entertainment value.

However, the growing qualitative and quantitative demands on players inevitably affect the quality of their performance.

Competing in matches every 4.5 days significantly hinders an athlete's ability to maintain a consistently high standard of performance, particularly when accounting for the additional physical and mental strain caused by travel and commitments between fixtures.

These factors severely limit opportunities for adequate physical and psychological recovery.

The "InjuryTime" report, compiled by the Italian Footballers' Association (AIC), examines the cumulative number of days lost to injuries among players contracted to clubs in Serie A, the Premier League, and La Liga.

The findings presented in this report are based on comprehensive data analysis conducted by AIC, utilizing information from Transfermarkt, Besoccer, and Capology.

The study analyzes two seasons, covering 120 clubs and focusing on the 25 highest-paid players at each club.

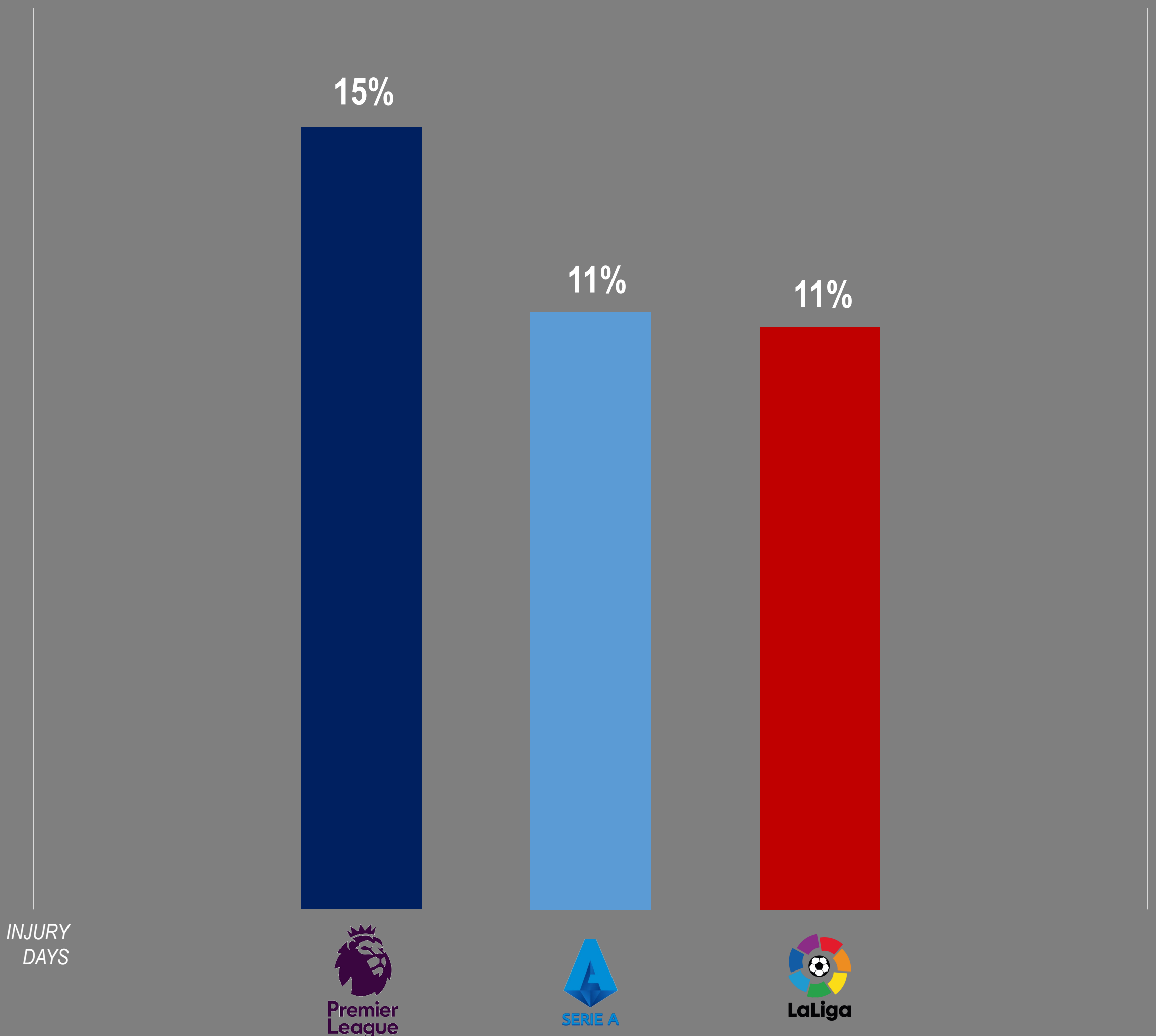


# TOTAL INJURIES 22/24

Aggregating the data from the two analyzed seasons, the teams in the three leagues recorded a total number of injury days per player\* consistently exceeding 10% of the total available days.

The Premier League recorded the highest overall figure: 1 out of every 6.6 available days was marked as "injured."

In Serie A and La Liga, the rate was 1 "injury day" for every 9 days.



\*This Report analyzes the squad composed of the 25 players with the highest salaries for each club.

# BEYOND THE LIMIT

The study highlights a clear statistical causal link between the number of matches played by a player [for the club = domestic league + national and international cups] and the risk of injury [measured in individual "injury days," rather than in missed league games], providing a clear magnitude of this risk.

The research considers the total injury days incurred by each player. The total days for each athlete may result from a single significant injury or the accumulation of less severe injuries.

Therefore, the recorded injury days are not necessarily "linear."

Finally, for the purposes of the study, the end of an injury is considered to be the day when the player is available again to the club as a selectable player for a match. It goes without saying that both a single severe and prolonged injury and a series of shorter but repeated injuries during a season compromise the achievement of optimal performance status.

The increase in the number of injuries remains almost constant from the 1st to the 42nd match played by a player in a single sports season.

From the 42nd to the 54th match, the upward trend becomes significantly more pronounced, showing a tangible increase in the risk of injury.

Assuming the trend remains constant [continuing the growth observed in the previous period, conservatively], it can be estimated that an **increase of 11 matches per season** would result in each club moving from an average of 1,430 injury days to an average of 2,140 injury days per season.

Considering the evidence from the research, the players affected by injuries are typically 20 per club and correspond to those who are deployed in 90% of the total minutes played. This suggests that these players face a considerably significant risk of injury.

As a result, projecting the club data onto the main figures of the spectacle, an increase in matches would lead to **each player experiencing an average increase from 71 to 107 injury days per season.**



**TODAY**

# 71

## INJURY DAYS

RECORDED OVER THE LAST 2 SPORTS SEASONS  
FOR A PLAYER\* IN A CLUB THAT PLAYS MORE THAN 50  
MATCHES



"The average number of injury days is calculated based on the 20 players who collectively play approximately 90% of the available minutes."

**TODAY**

**54**

**MATCHES**

NUMBER OF MATCHES PER SEASON  
FOR A TOP-TIER CLUB [LEAGUE +  
CUPS]"

**71**

**INJURY  
DAYS**

AVERAGE INJURY DAYS PER SEASON  
RECORDED OVER THE LAST 2  
SEASONS BY A PLAYER IN A CLUB  
THAT PLAYS MORE THAN 50  
MATCHES"

**+11**

**MATCHES**

**107**

**INJURY  
DAYS**

36 INJURY DAYS PER SEASON PER  
PLAYER"

**TOMORROW**



**TOMORROW**

**107**

**INJURY  
DAYS**

PROJECTION: AVERAGE INJURY DAYS PER SEASON FOR A  
PLAYER IN A CLUB THAT PLAYS THE MAXIMUM NUMBER OF  
MATCHES



S



UEFA FOUNDATION for children

UEFA CHAMPIONS LEAGUE

OFFICIAL MATCH BALL

ELITE

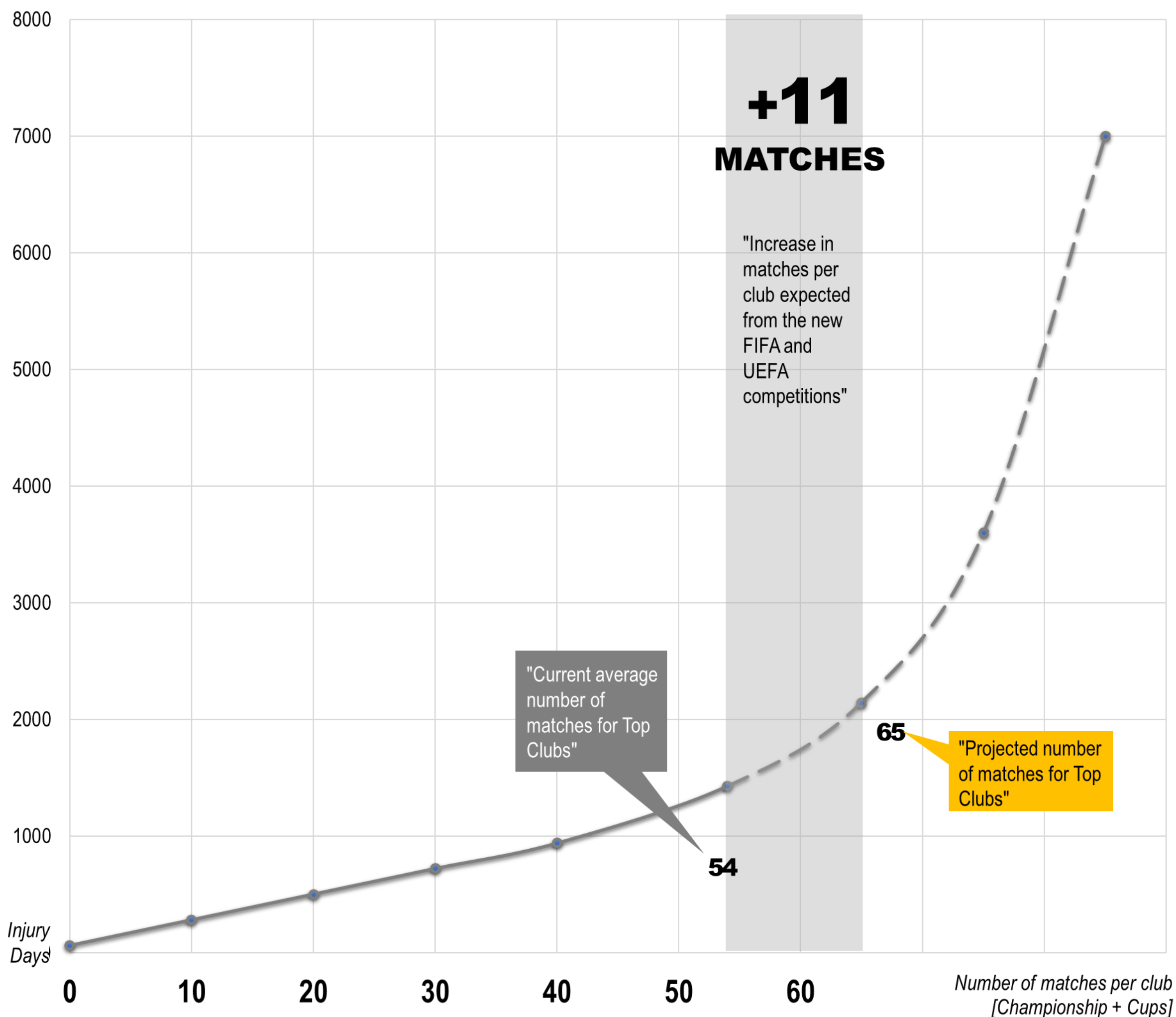
COURT

# RISK FOR CLUB

The higher the number of matches played by a club, the greater the number of injured players and the total days of unavailability.

Once 40 matches are exceeded, the "burden" of injuries for a club [measured in days per season] grows exponentially.

This increase becomes even more significant beyond the threshold of 54/55 matches [the maximum number played by clubs in the two analyzed seasons] up to 65 matches per season [the number of matches expected under the new FIFA and UEFA formats].



*\*\*The graph analyzes league and national and international cup matches for the 5 clubs with the highest number of matches played [average for 22/23 and 23/24 seasons] across the three analyzed leagues.*



**+50%**  
**INCREASE  
IN INJURY DAYS  
PER CLUB**

PROJECTION IN CASE OF IMPLEMENTATION OF THE NEW FORMAT

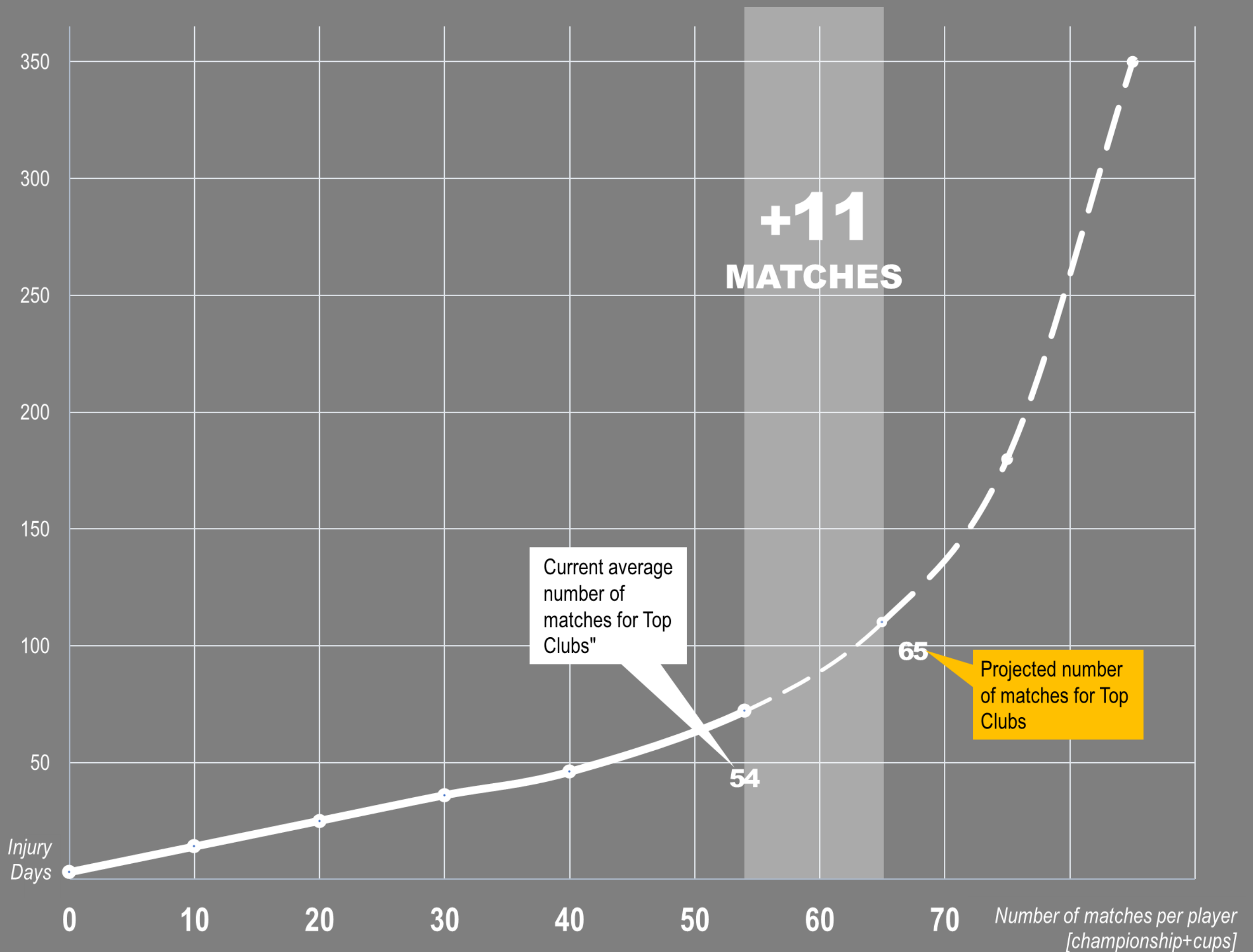
# RISK FOR PLAYER

A club that plays 54 matches per season typically uses, on average, 20 players for 90% of the total minutes played. Each of these players is injured for an average of 71 days [not necessarily consecutive] during the season\*.

Currently, a player from a top club is therefore injured for 20% of the days in a year.

In practical terms: they are unavailable to participate in activities 1 day out of 5.

If the number of matches exceeds the current threshold of 54/55 club matches per season, the risk would rise to 30% of the days. In practical terms: a player would be unavailable due to injury for an average of 1 day out of 3, considering only the days required to rejoin the group.



\*"Average calculated for each of the 20 players who play 90% of the total minutes in the 5 clubs [Premier League, Serie A, and La Liga] with the highest number of matches played per season. Data averaged for the 22/23 and 23/24 seasons."



**1 DAY OUT OF 3**

**DAYS OF UNAVAILABILITY**

**DUE TO INJURY**

**FOR EACH FOOTBALLER**

PROJECTION PER SEASON  
IN CASE OF IMPLEMENTATION OF THE NEW FORMAT



# BEYOND THE RISK

The data in this report exclusively analyze club commitments.

As is well known, many players from the analyzed clubs also participate in national team activities, which, like club commitments, have increased over recent seasons.

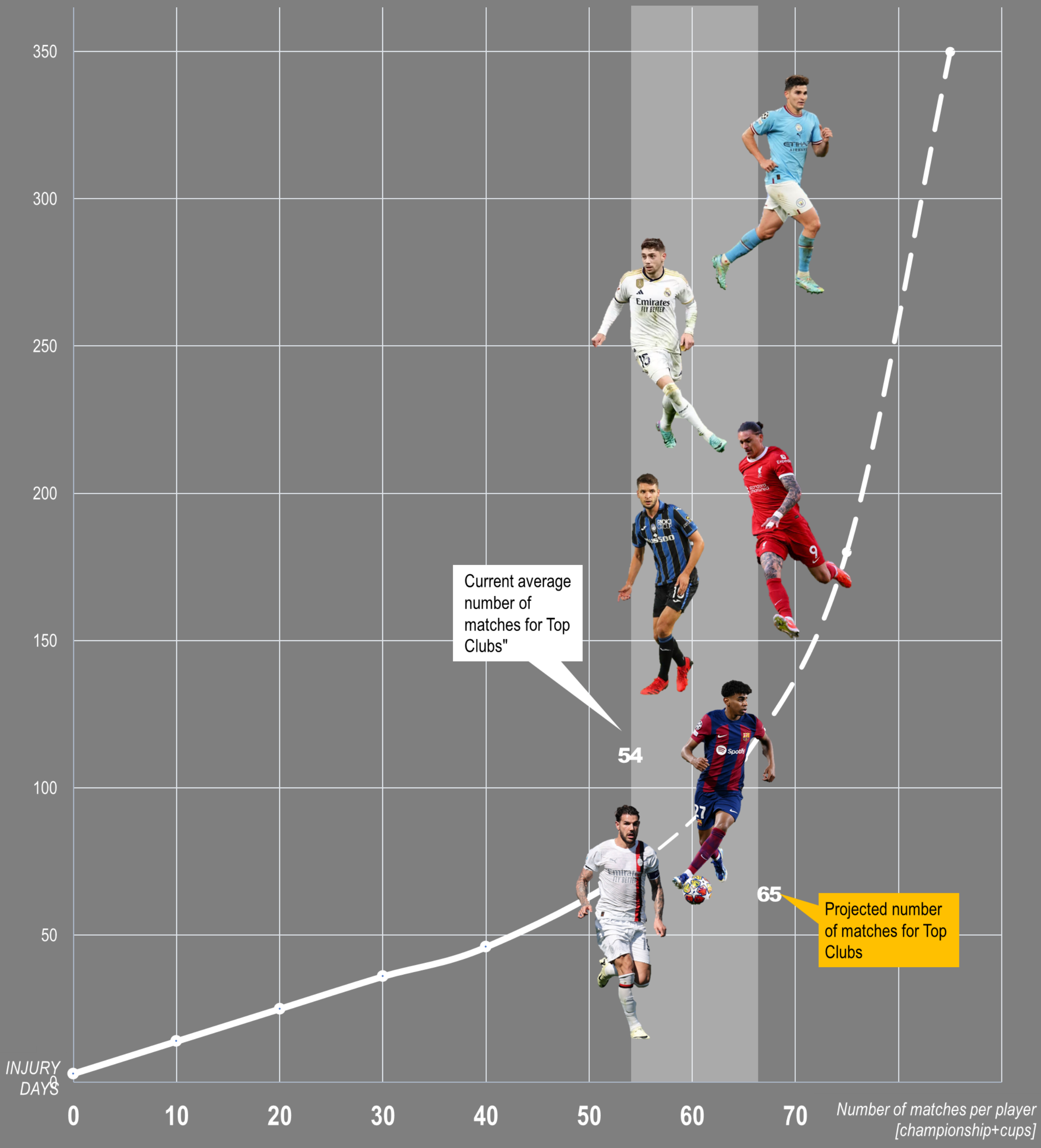
Julian Alvarez, Federico Valverde, and Tijjani Reijnders played the maximum number of matches [54] for their respective clubs in the 23/24 season. However, when including national team commitments, players like Alvarez reached a total of 69 matches in the same sporting season. Valverde played 67 matches [the same as Phil Foden and Darwin Nunez]. Reijnders, the top Italian player in this regard, totaled 65 official matches [club and national team combined], the same as Berat Djimsiti. This is one less than İlkay Gündoğan [66] and one more than Lamine Yamal [64]. Theo Hernandez, in the year he played in the European Championship semi-final [following the season in which he appeared in the World Cup final with his national team], played 62 matches.

Players in this category have averaged 1 match every 5 days over the past two seasons.

This level of commitments, both mathematically and predictably, leads to a significant decline in the "spectacle" level that each club aims to provide to the television broadcaster purchasing the retransmission rights and that the club, broadcaster, and athlete collectively aim to deliver at the highest possible standard.

The increase in matches proposed by the new formats [club + national teams] would push athletes towards the "critical" threshold of 80 matches per season: **1 match every 4.5 days.**

This would effectively place players in a situation where they CANNOT perform adequately to meet the expected spectacle level, facing a projected injury risk [based on forecasts\*] of around 150 days per season. According to trends highlighted by the graph, reaching 75 matches for a club [plus those scheduled with national teams] would expose players to an injury risk approaching 100%.



Current average number of matches for Top Clubs"

54

65

Projected number of matches for Top Clubs

INJURY DAYS

Number of matches per player [championship+cups]



FA COMMUNITY SHIELD  
MANCHESTER UNITED  
v  
MANCHESTER CITY  
WEMBLEY STADIUM  
10 AUGUST 2024



Snapdragon



HEAT.RDY



10

# DEPRECIATING INJURY

## What Does "Getting Injured" Mean?

An injury, regardless of its severity, represents a risk associated with an athlete's performance. There have been historical periods when certain injuries could even lead to the premature end of a career.

In recent decades, medical research, athletic training, and available technological tools have significantly contributed to making optimal physical condition "recoverable" in almost all injuries, even the most severe ones. In many cases, these tools have also enabled the prediction of excessive risk conditions that athletes might face before an injury occurs.

On the other hand, the speed and quality demanded by the dynamics of modern sport-entertainment require an ever-increasing level of physical and mental performance. This level demands constant, meticulous preparation with attention to the smallest details. In this process, every "interruption" represents a setback, not just in terms of physical recovery but also in regaining the athlete's optimal "confidence," both physically and mentally.

It is important to note that a long-term injury has a specific kind of impact. However, even short but repeated injuries prevent players from reaching their optimal form. Whether it's a long-term injury or recurrent short-term injuries, the athlete is unable to fully participate in the club's sporting performance or contribute to the expected level of spectacle.

For these reasons, this section of the Report analyzes injuries that resulted in a player's unavailability for more than 3 months (90 days) during the season, whether those 90 days were consecutive or spread out over various periods.

These injuries are defined in this Report as "devaluating" injuries because they affect the value of the athlete, the club, and the spectacle itself.

Such injuries are a major issue for the athlete's sports recovery as they typically compromise the achievement of optimal performance status.

The trend highlighted in the research foresees a predictable increase in this type of injury, linked to the growing demands placed on individual athletes. More injuries, and of greater severity, are expected.



In the 22/23 season, the Premier League recorded a percentage of "devaluating" injuries at 17% of the total.

In the 23/24 season, such injuries rose to 21%, marking a 43% increase in this type of injury among the top five clubs with the highest number of matches played.

On average, in the English league, a "top" club has 6 players injured for more than 3 months in each season, compared to 4 players in a "less" club.



In Serie A, the percentage of players experiencing "devaluating" injuries was 12% in the 23/24 season, remaining substantially stable compared to the previous season [12.4%].

Similarly, in Italy, "top" clubs on average report 2 more players with injuries lasting over 3 months compared to "less" clubs.



14.4% of players in La Liga were injured for more than 3 months during the 23/24 season, a significant increase compared to the 9.2% recorded in the previous season.

This increase primarily affected "top" teams [27% in the 23/24 season compared to 17% in the 22/23 season].

Each Spanish "top" club, on average, has 3 more players injured for over 90 days compared to "less" clubs.



adidas



Emirates  
FLY BETTER

9

adidas



# \* CLUB «TOP»

IN THE REPORT, WE DEFINED "TOP" THE 5 CLUB THAT PLAYS THE HIGHEST NUMBER OF MATCHES [CHAMPIONSHIP+ INTERNATIONAL CUPS] DURING THE LAST TWO SEASON

# \*\* CLUB «LESS»

5 CLUB THAT PLAYS THE FEWEST NUMBER OF MATCHES DURING THE LAST TWO SEASON

# NUMBER OF MATCHES

CLUB «TOP»

5 CLUB THAT PLAYS THE HIGHEST  
NUMBER OF MATCHES PER  
CHAMPIONSHIP

*Average per season 22/23 E 23/24*

55



The clubs that recorded the highest number of matches per league [top 5 positions] played between 54 [La Liga and Serie A] and 55 [Premier League] official matches during the 22/23 and 23/24 seasons.

54



The reported figures include only league matches and national and international cup competitions. They do not account for friendlies, pre-season tours, or, most notably, players' call-ups to national teams for any type of competition.

54



During the 24 months spanning the two analyzed seasons, two major national team competitions took place: the FIFA World Cup 2022 [which, for the first time, caused a long winter break in domestic leagues] and UEFA Euro 2024.

During the same period as the European Championships in 2024, equivalent continental competitions for national teams were also held.



# NUMBER OF MATCHES

## CLUB «LESS»

5 CLUB THAT PLAYS THE FEWEST  
NUMBER OF MATCHES PER  
CHAMPIONSHIP

*Average S.S. 22/23 E 23/24*

The clubs that play the fewest matches [bottom 5 positions] per league are those that do not qualify for international competitions and, simultaneously, do not advance to the final stages of national cup tournaments.



42

The number of matches, even in this case, does not include players' call-ups to their respective national teams but only accounts for domestic club competitions and any cup tournaments.



41

Serie A is the league with the greatest variation in the number of matches between the "top" and "bottom" clubs, with a +35% difference in matches played on average by the top five clubs compared to the bottom five.



40



# THE CALENDAR

The comparison between the 2022/23 and 2023/24 seasons considers various factors.

The 2022/23 season was the first to feature an extended winter break for all the analyzed leagues. This unprecedented schedule, imposed by the FIFA World Cup, provided athletes not called up to their national teams with a much longer rest period than traditional winter breaks. Additionally, athletes called up by their national teams but not reaching the final rounds were afforded adequate rest time.

The scheduling of the World Cup and the winter break positively influenced the number of injuries per season.

The 2023/24 season followed the traditional sports calendar model, starting in the summer [Premier League: August 11, La Liga: August 11, Serie A: August 21] and running through to May 2024. During the same period, as usual, national and international cup competitions took place.

At the end of the analyzed domestic leagues, the UEFA Euro 2024 continental championship was held.

For the first time, the two main national team competitions were held within a period shorter than two seasons. Additionally, for the first time, one of these competitions interrupted league activities for a period exceeding 30 days.

The analyzed data considers injuries suffered by players contracted to clubs in the three analyzed leagues during the entire duration of the 2022/23 and 2023/24 seasons, including incidents that occurred during the UEFA Euro 2024 and the corresponding continental competitions held in the summer of 2024.



**FIFA WORLD CUP**  
**Qatar 2022**

20 NOVEMBER 22  
18 DECEMBER 22



**UEFA**  
**EURO2024**  
GERMANY

14 JUNE 24  
14 JULY 42



# INJURIES INCREASING

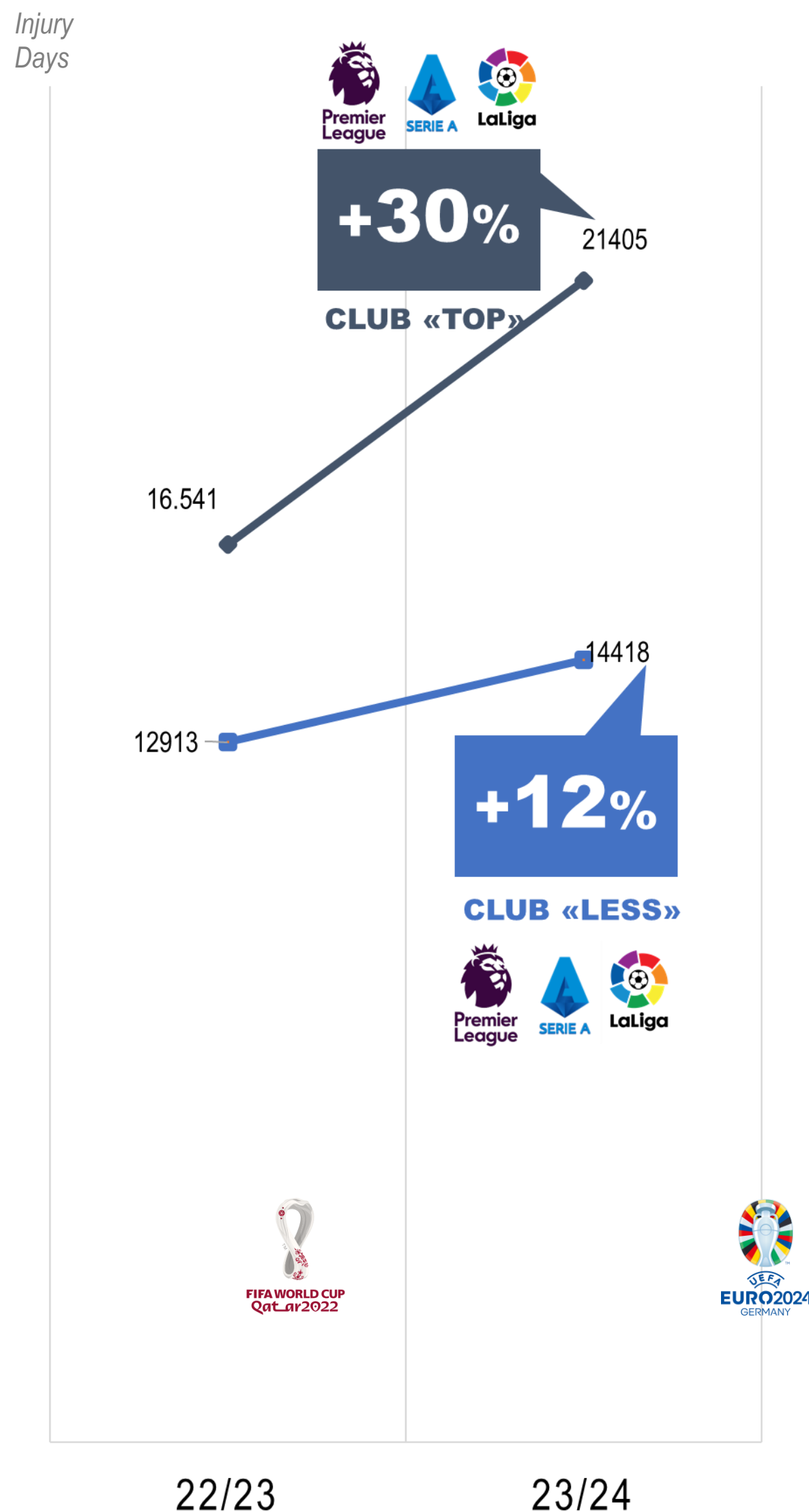
We begin with an observation as obvious as it is necessary: players from clubs that play more matches suffer more injuries than those from clubs that play fewer games.

All else being equal in terms of the number of matches played, the schedule significantly impacts injuries. **The data clearly show a sharp increase in injuries** during the 23/24 season compared to the 22/23 season, which had been interrupted by the World Cup.

The winter break introduced by the World Cup evidently had a positive effect on the overall number of injuries, benefiting both clubs participating in the final stages of cup competitions and those playing almost exclusively in league matches.

Conversely, the European Championship [and other continental competitions] held at the end of the season **without any continuity break** increased the number of injuries.

The top clubs\* in the three leagues recorded an average 30% increase in total injury days during the most recent season, a growth more than double that of clubs that played approximately 40 matches. The latter group, however, still registered a 12% increase in injuries compared to the previous season.



*\*In the report: we call «top club» 5 club that plays the highest number of matches [championship + national and international cups] in the last two season*



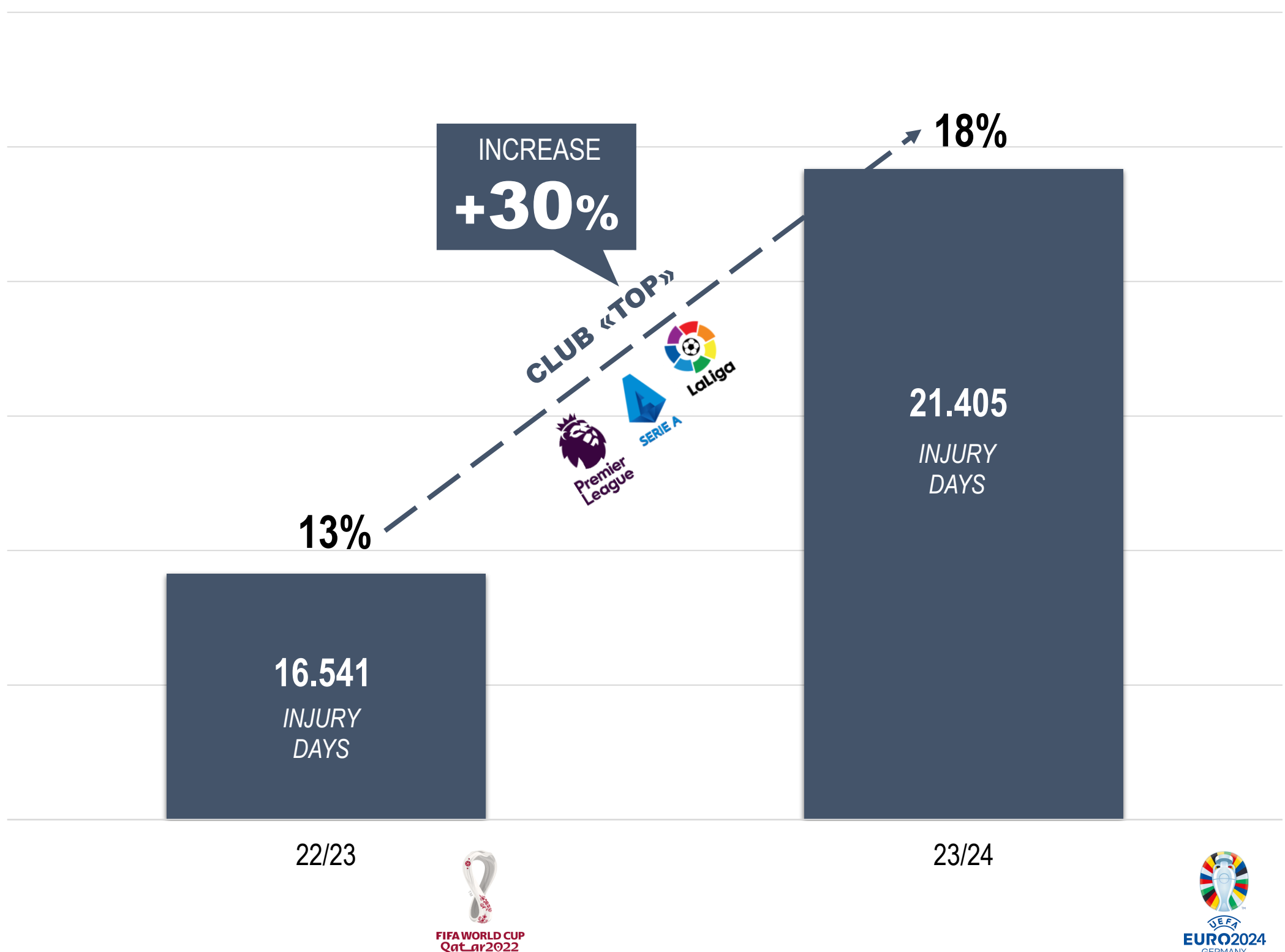
# INJURIES PER CLUB TOP

The adjacent graph illustrates the increase in the total number of injury days during the 23/24 season compared to the previous season, focusing on the top 5 clubs [from each of the analyzed leagues] that played the highest number of matches, including league games, national cups, and international competitions.

In the 22/23 season, these clubs recorded 13% of days as "injury days." In the following season, this figure rose to 18%, representing a 30% increase in total injury days.

As previously noted, the long winter break for the World Cup during the 22/23 season helped maintain a lower number of injury days.

La Liga recorded the highest increase between the two seasons [+61%].

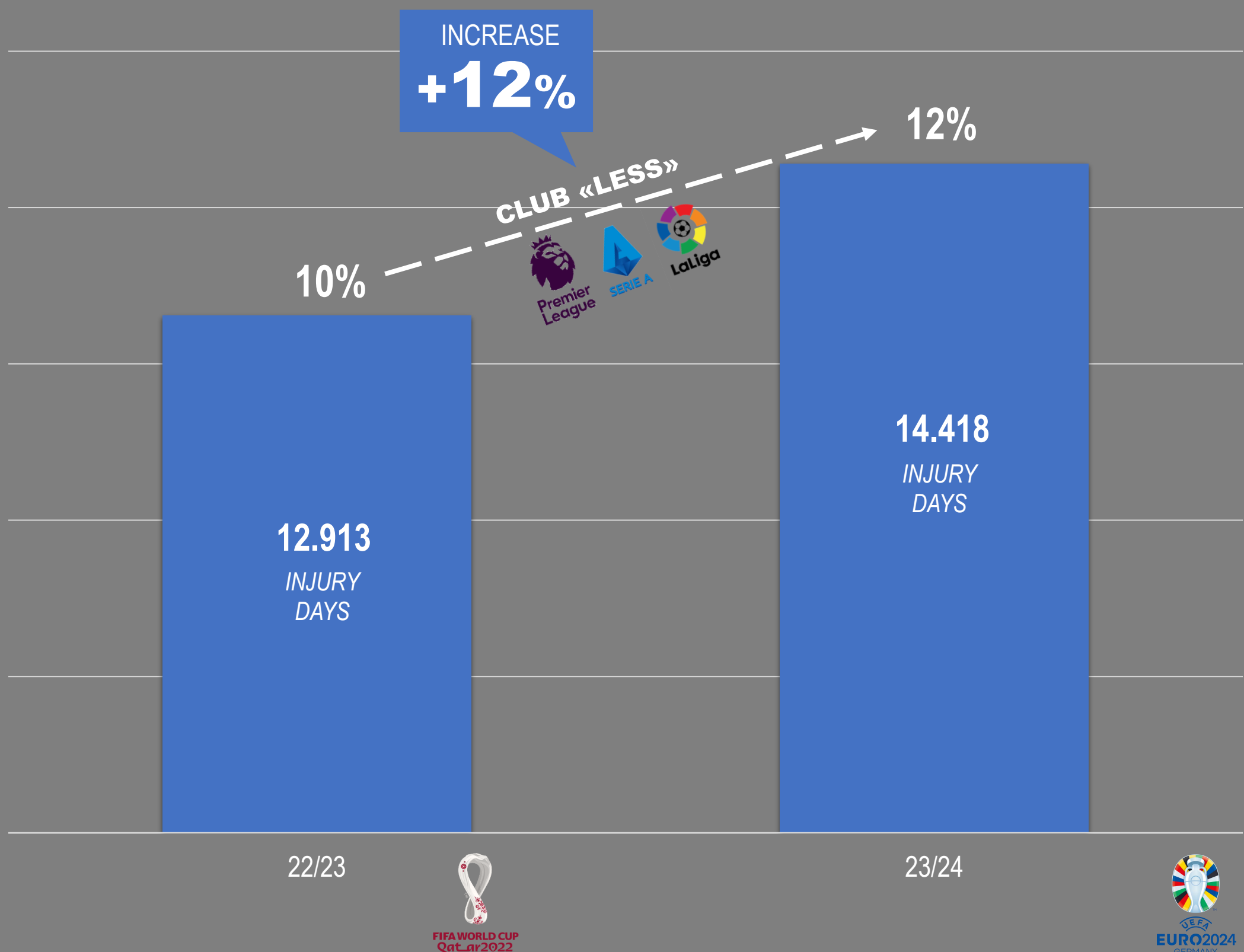


# INJURIES PER CLUB LESS

The increase in injury days for the five clubs that played the fewest matches [league and cups] across the three analyzed leagues was smaller but still significant.

Even in this category, La Liga clubs recorded the worst increase [+25%] between the 23/24 season and the previous one.

La Liga also showed the largest difference in injury days between Top Clubs and Less Clubs. The latter recorded 35% fewer injury days. Following this are the Less Clubs of Serie A [-14%] and, finally, those of the Premier League [-9% compared to the percentage of injuries in Top Clubs].





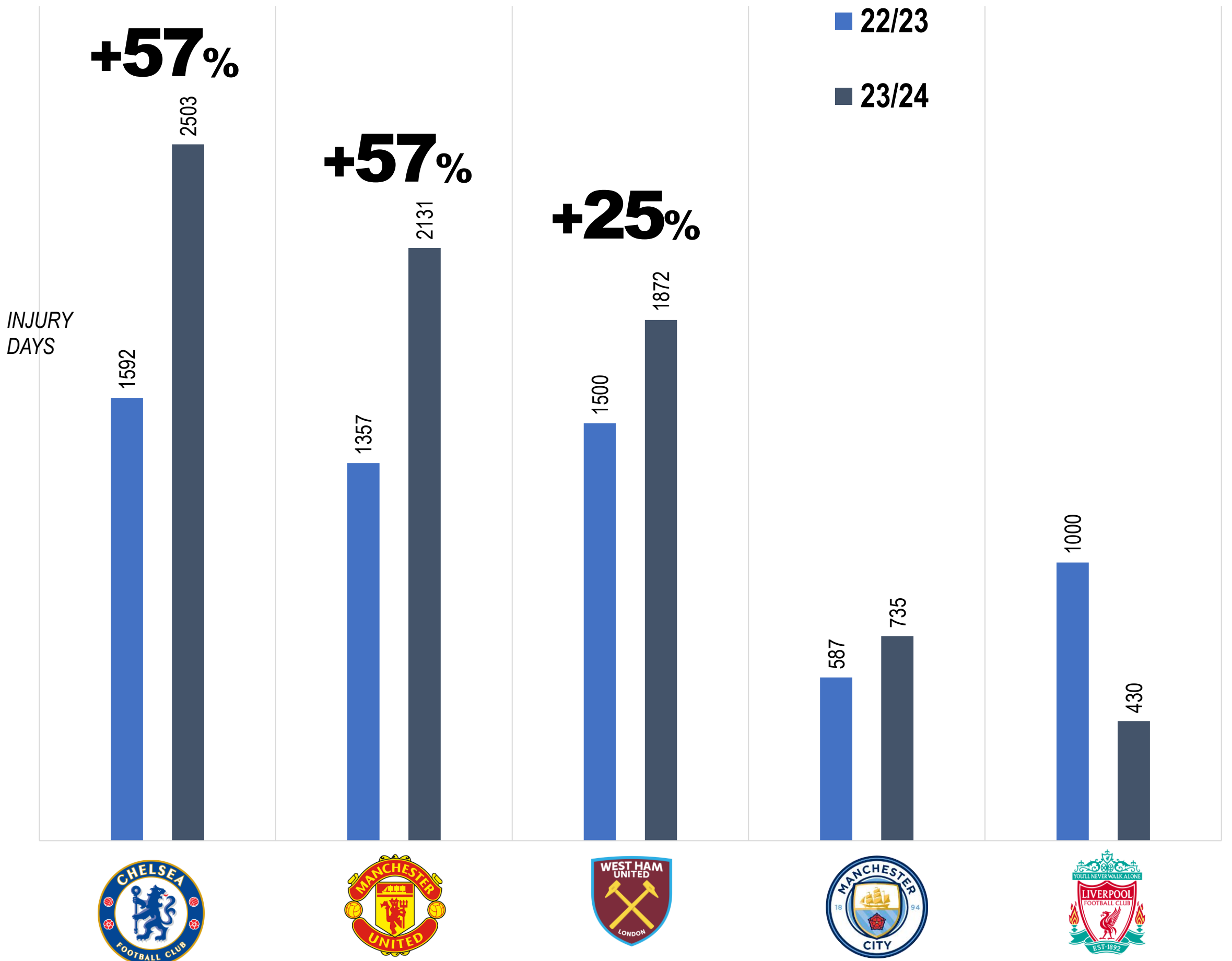


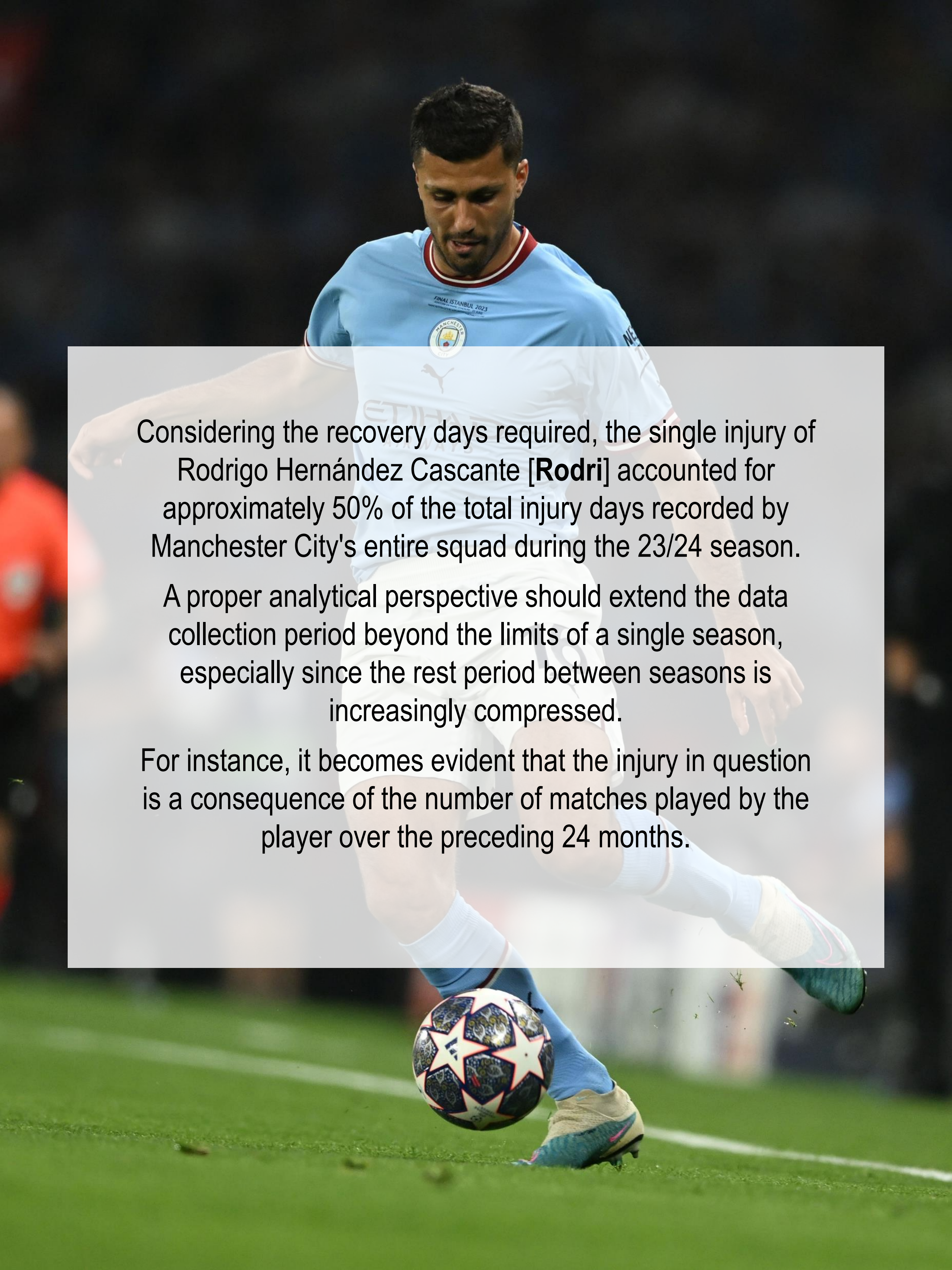


Premier League

# INJURIES

FIVE CLUB THAT PLAYS THE HIGHEST NUMBER OF MATCHES  
[CHAMPIONSHIP + NATIONAL AND INTERNATIONAL CLUBS]



A photograph of a Manchester City player, Rodrigo Hernández Cascante (Rodri), in action on a football pitch. He is wearing a light blue Manchester City jersey with white shorts and is focused on a football at his feet. The jersey features the club crest and the text 'FINAL ISTANBUL 2023'. The background is a blurred stadium setting.

Considering the recovery days required, the single injury of Rodrigo Hernández Cascante [**Rodri**] accounted for approximately 50% of the total injury days recorded by Manchester City's entire squad during the 23/24 season.

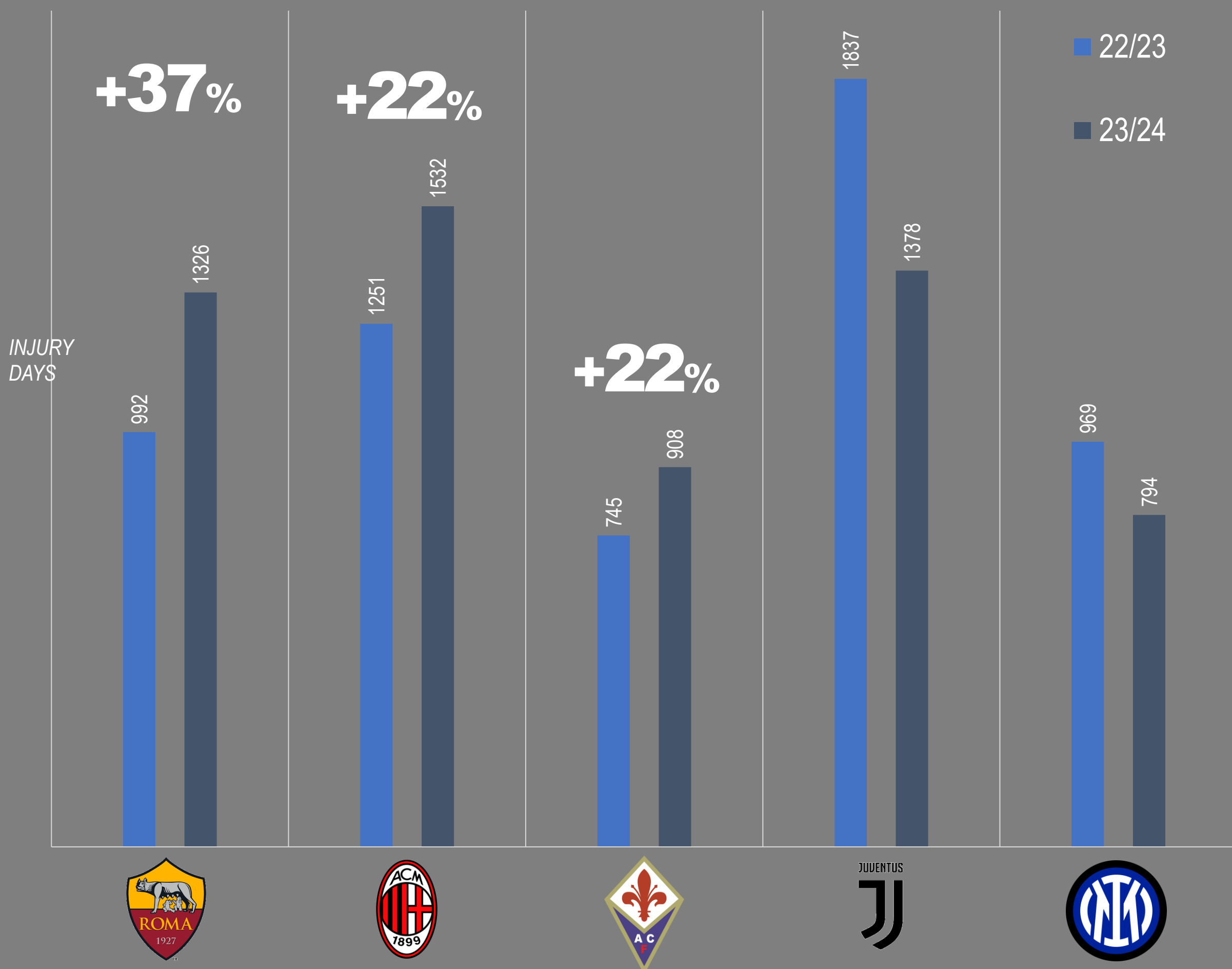
A proper analytical perspective should extend the data collection period beyond the limits of a single season, especially since the rest period between seasons is increasingly compressed.

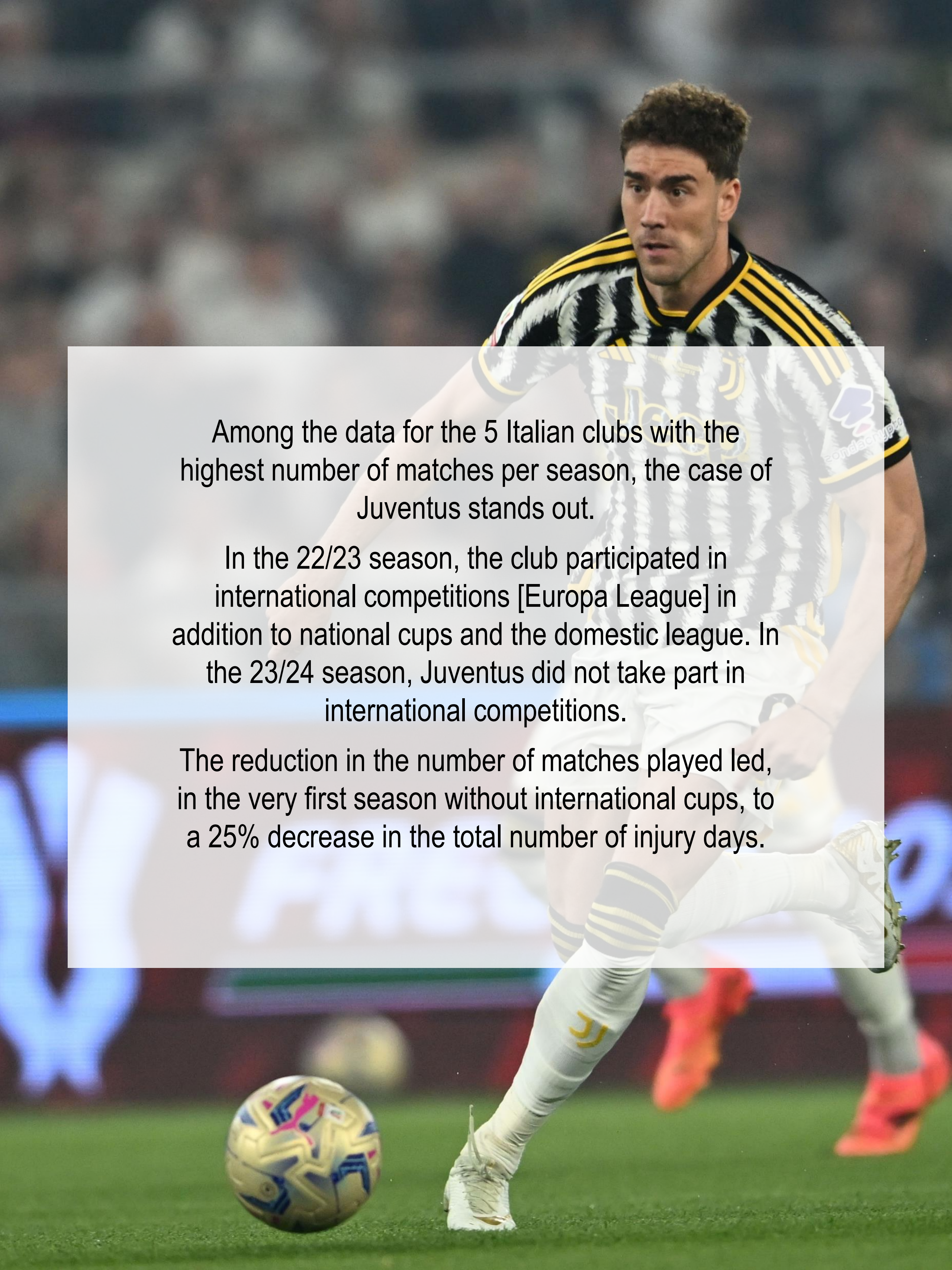
For instance, it becomes evident that the injury in question is a consequence of the number of matches played by the player over the preceding 24 months.



# INJURIES

FIVE CLUB THAT PLAYS THE HIGHEST NUMBER OF MATCHES  
[CHAMPIONSHIP + NATIONAL AND INTERNATIONAL CLUBS]



A soccer player in a Juventus kit is running on a field. The kit is black and white with yellow stripes on the shoulders. The player is looking to the left. In the foreground, a soccer ball is on the grass. The background is blurred, showing a stadium setting.

Among the data for the 5 Italian clubs with the highest number of matches per season, the case of Juventus stands out.

In the 22/23 season, the club participated in international competitions [Europa League] in addition to national cups and the domestic league. In the 23/24 season, Juventus did not take part in international competitions.

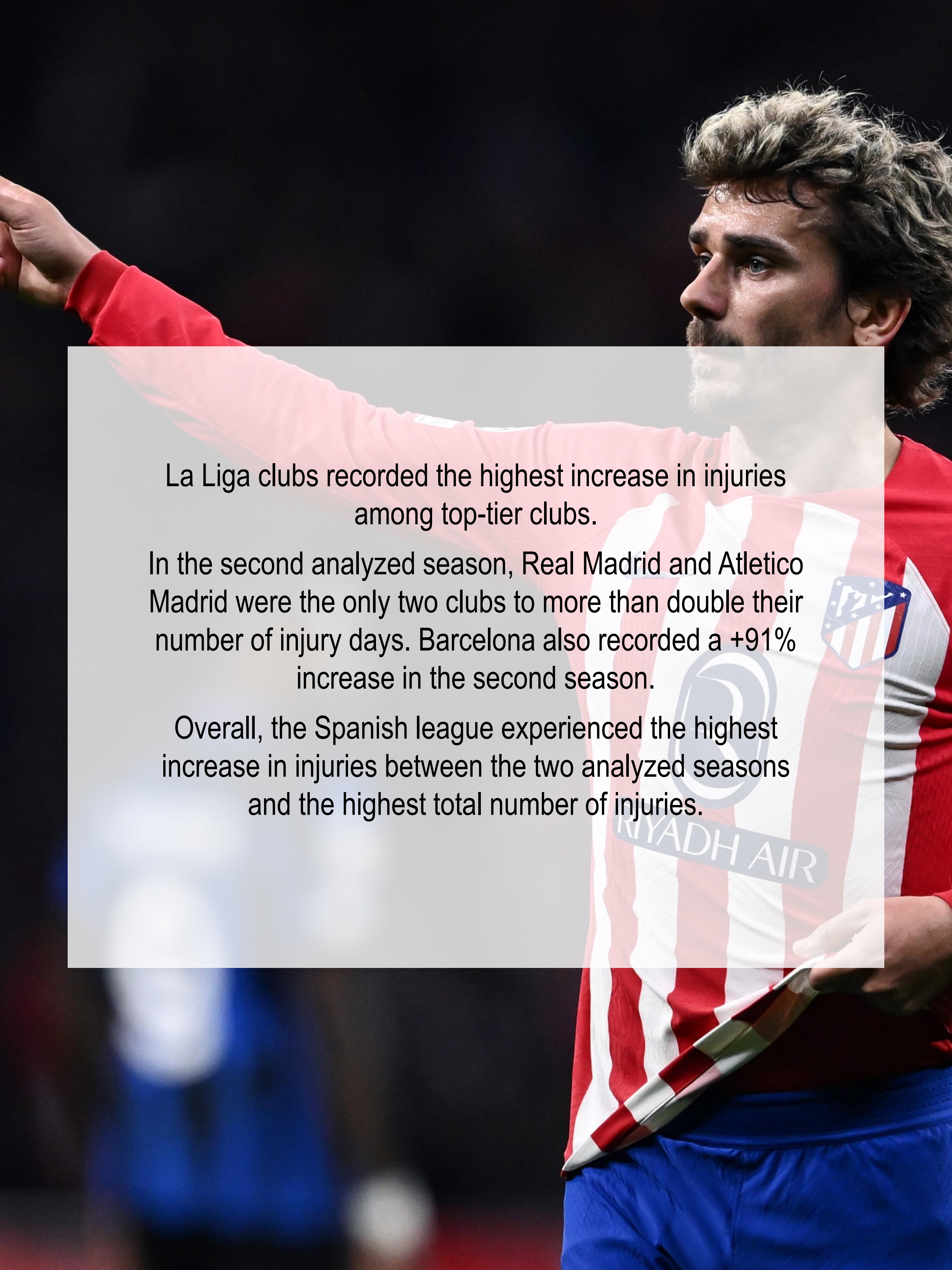
The reduction in the number of matches played led, in the very first season without international cups, to a 25% decrease in the total number of injury days.



# INJURIES

FIVE CLUB THAT PLAYS THE HIGHEST NUMBER OF MATCHES  
[CHAMPIONSHIP + NATIONAL AND INTERNATIONAL CLUBS]





La Liga clubs recorded the highest increase in injuries among top-tier clubs.

In the second analyzed season, Real Madrid and Atletico Madrid were the only two clubs to more than double their number of injury days. Barcelona also recorded a +91% increase in the second season.

Overall, the Spanish league experienced the highest increase in injuries between the two analyzed seasons and the highest total number of injuries.

**LESS**  
**IS MORE**





# INJURIES PRICE

An injury to a player represents an economic loss for a club equivalent to the cost the club must bear for the player's salary during their unavailability ["days of absence"] and the resulting depreciation of their market value ["devaluation"].

When a player suffers an injury [either single or cumulative] that keeps them off the field or in a "subperforming" state, the club must still cover the cost of their salary. Additionally, by the end of the sports season, the club will have a player in their squad whose market value is likely lower than it was prior to the injury.

As a precautionary measure, a 20% devaluation of the player's performance value has been applied for injuries that kept the player off the field for more than 3 months during the season.

For both "economic risks" associated with an injury, a club has the option to insure itself, incurring an additional expense. However, the cost of such insurance, which has risen due to the growing risk, has become so high that these policies are now increasingly rare or reserved for select players.

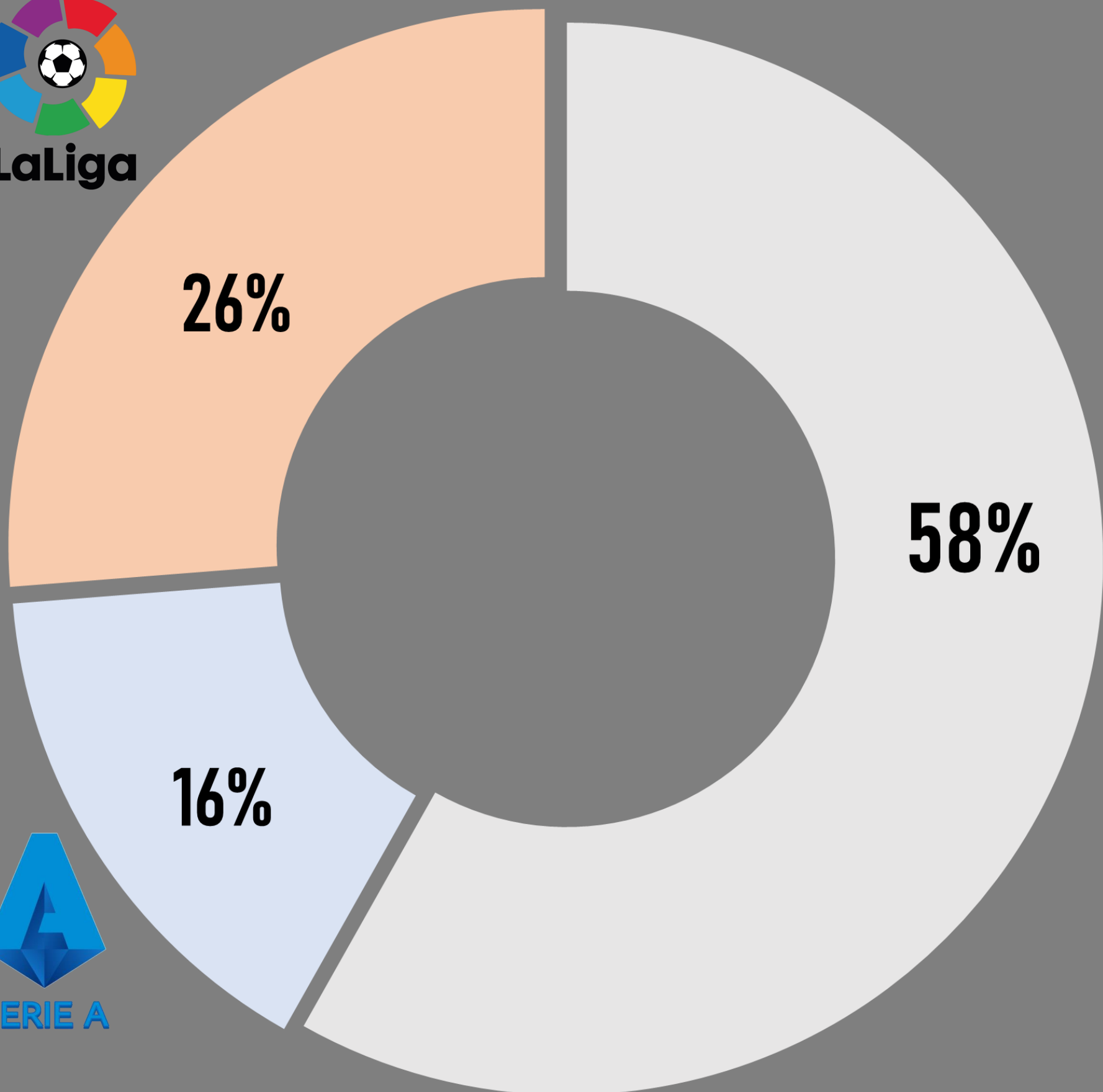
This second part of the research, titled "**Less is More**", aims to provide an estimate of the economic value of the risk associated with the number of matches and the consequent [and previously discussed] risk of injuries.

In the following data, the total value of the "economic damage" is considered, calculated as the sum of two factors: days of absence + devaluation of market value.

# 1.475 MILLION

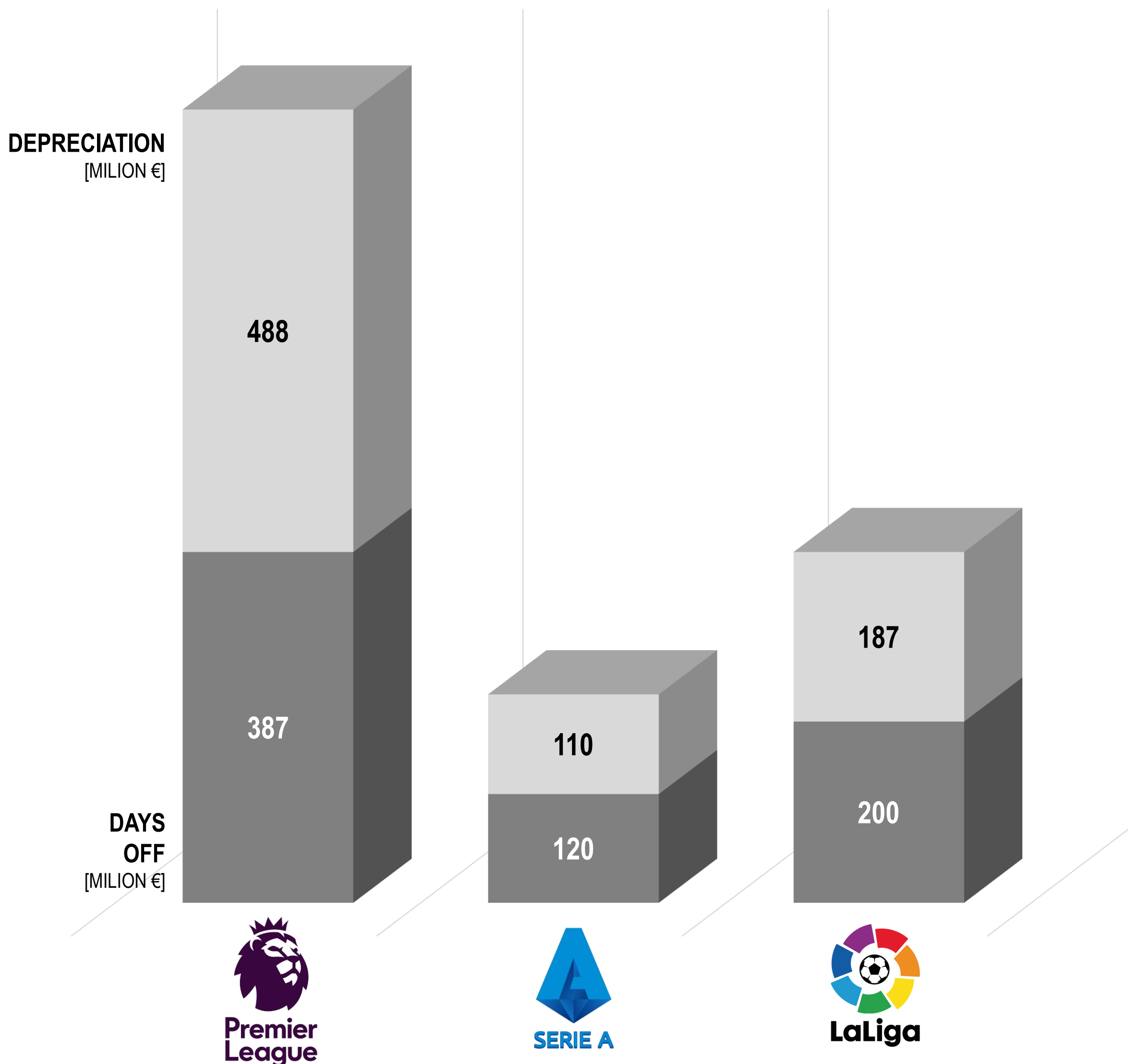
## TOTAL LOSS PER INJURIES

TOTAL PER SPORTS SEASON 23/24



# INJURIES PRICE

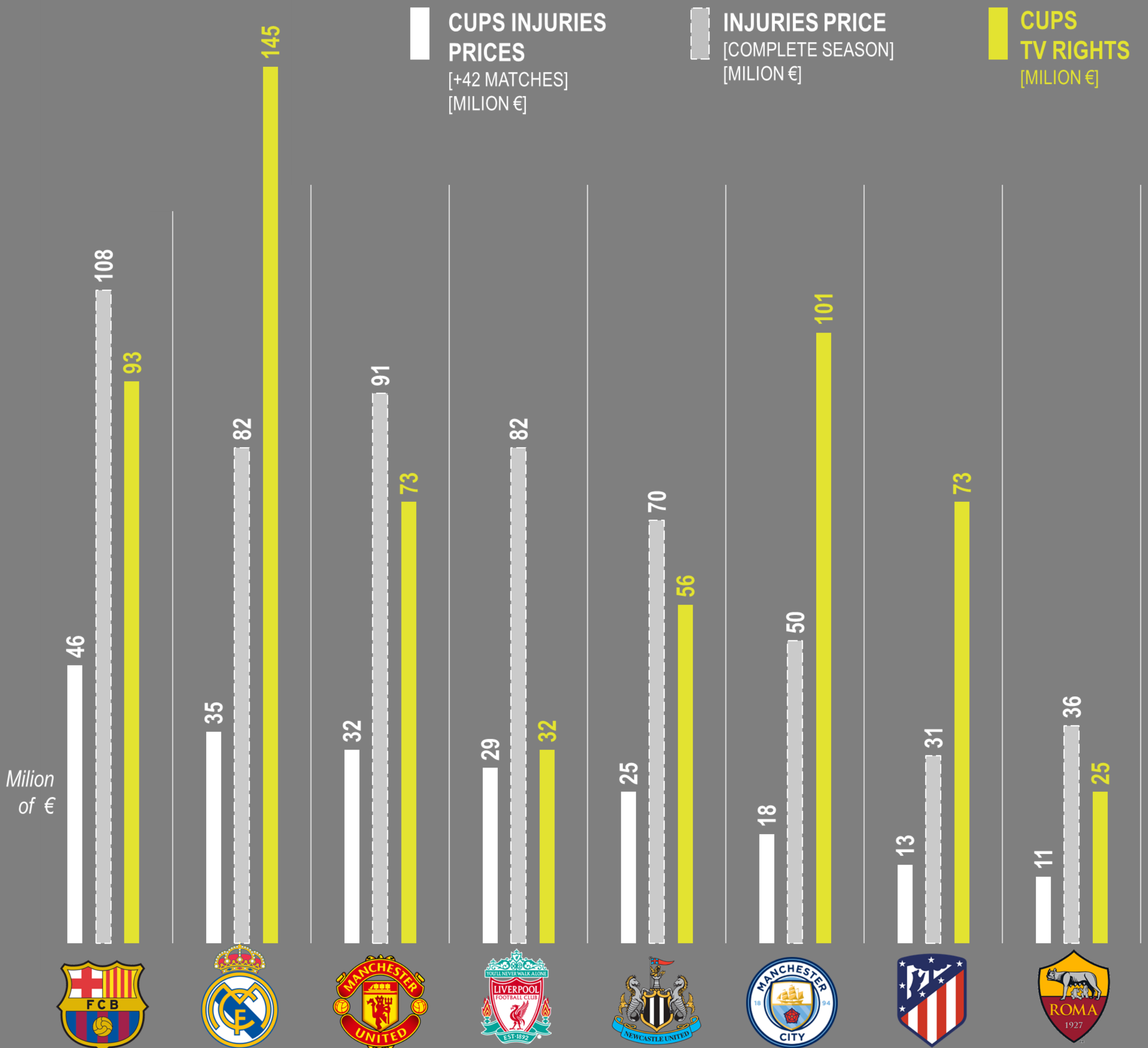
Due to higher wage bills and squad values, English clubs bear the highest costs for injuries. Italian and Spanish clubs, on the other hand, record higher losses from the value of days of absence compared to those generated by the devaluation of injured players.



# PRICE OF THE CUPS

Clubs participating in cup competitions record a higher percentage of injuries compared to clubs that only compete in league matches.

Participation in cups entails an additional cost in terms of injuries, which contributes to the total injury cost for clubs.

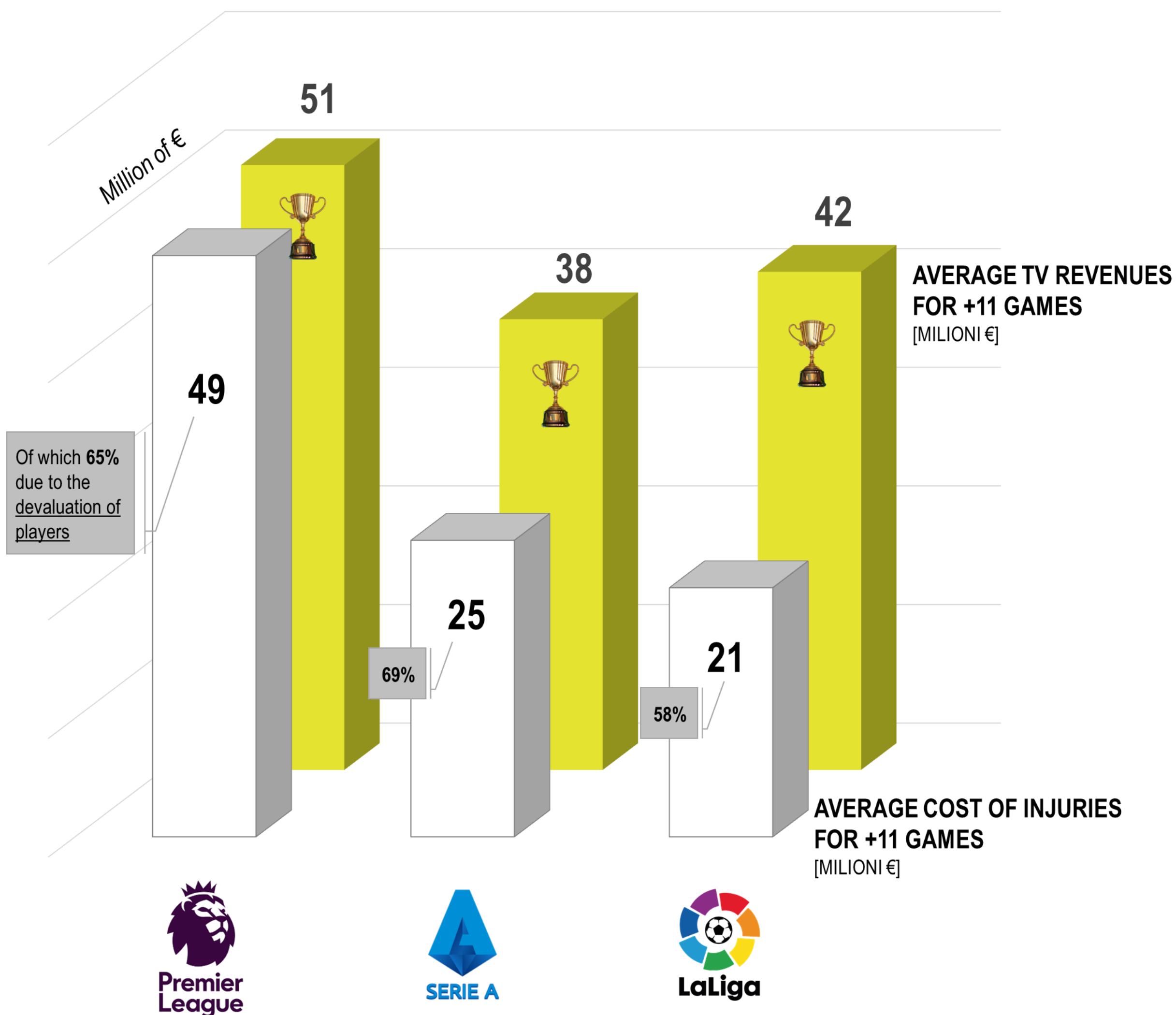


# PRICE OF NEW

## CUPS

Adding an average of 11 matches per club, as anticipated by the new FIFA and UEFA formats, will result in increased revenue from television rights. However, as previously discussed, a further increase in matches will also lead to a greater number of injury days for the players in the squad.

The chart compares the revenue [average per club] derived from TV rights under the new formats with the total cost of injuries that these additional matches will impose on the clubs [average per club].



\*Data projection by number of matches foreseen by the new FIFA and UEFA formats.

# DATA



## WORKING GROUP



Ing. Marco Piccinni  
AIC Professional Area Collaborator



Avv. Fabio G. Poli  
Organizational Director AIC



