



Youth Soccer Players Undergoing Anterior Cruciate Ligament Reconstruction Demonstrate High Rates of Continuation of Sport and Progression to Professional Level Soccer: A Seven Season Analysis

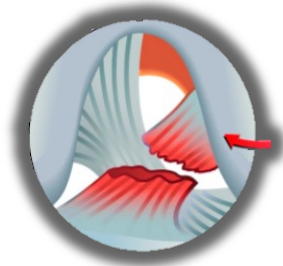
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INTRODUCTION



**Increasing numbers of high level skeletally immature patients
are experiencing ACL injuries.**



**Even with advancements in ACL reconstruction surgery, the future of
their career is still uncertain,
despite appropriate and timely surgical treatment.**



INTRODUCTION

**The rate of return to sport and continuation of sport after
ACL reconstruction in soccer athletes remains
controversial in the literature.**

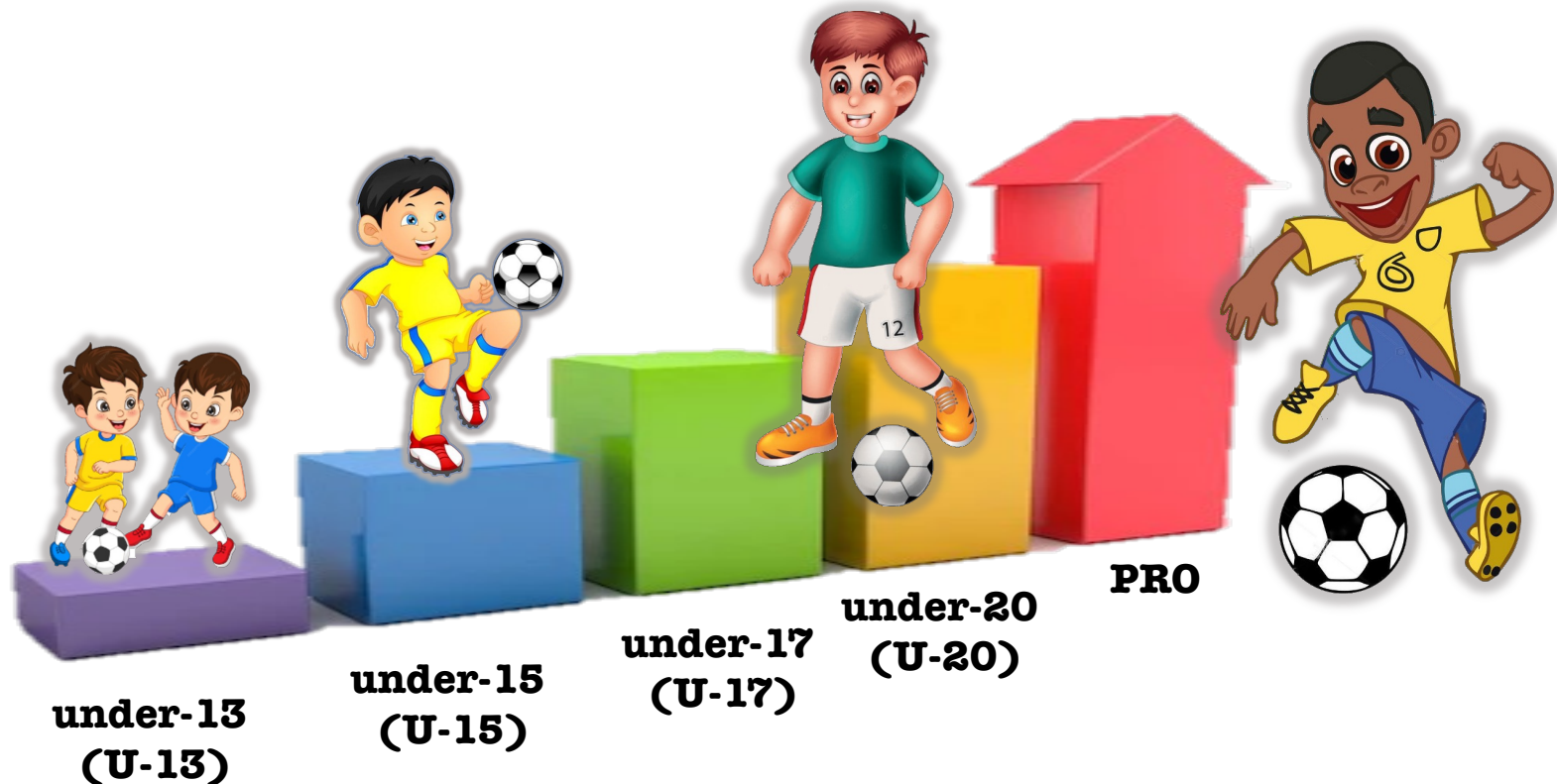


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PURPOSE

to evaluate the progression of youth male soccer athletes who undergo ACL reconstruction and track their progression from youth up to professional level play



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METHODS

- Prospective chart study
- 5172 male youth soccer players (11-20 years-old)
- 29 professional clubs in Brazil
- from 2015 to 2023 seasons
- Inclusion: ACL reconstruction surgery in youth patients

After ACL recon:

Are they still playing?

OR

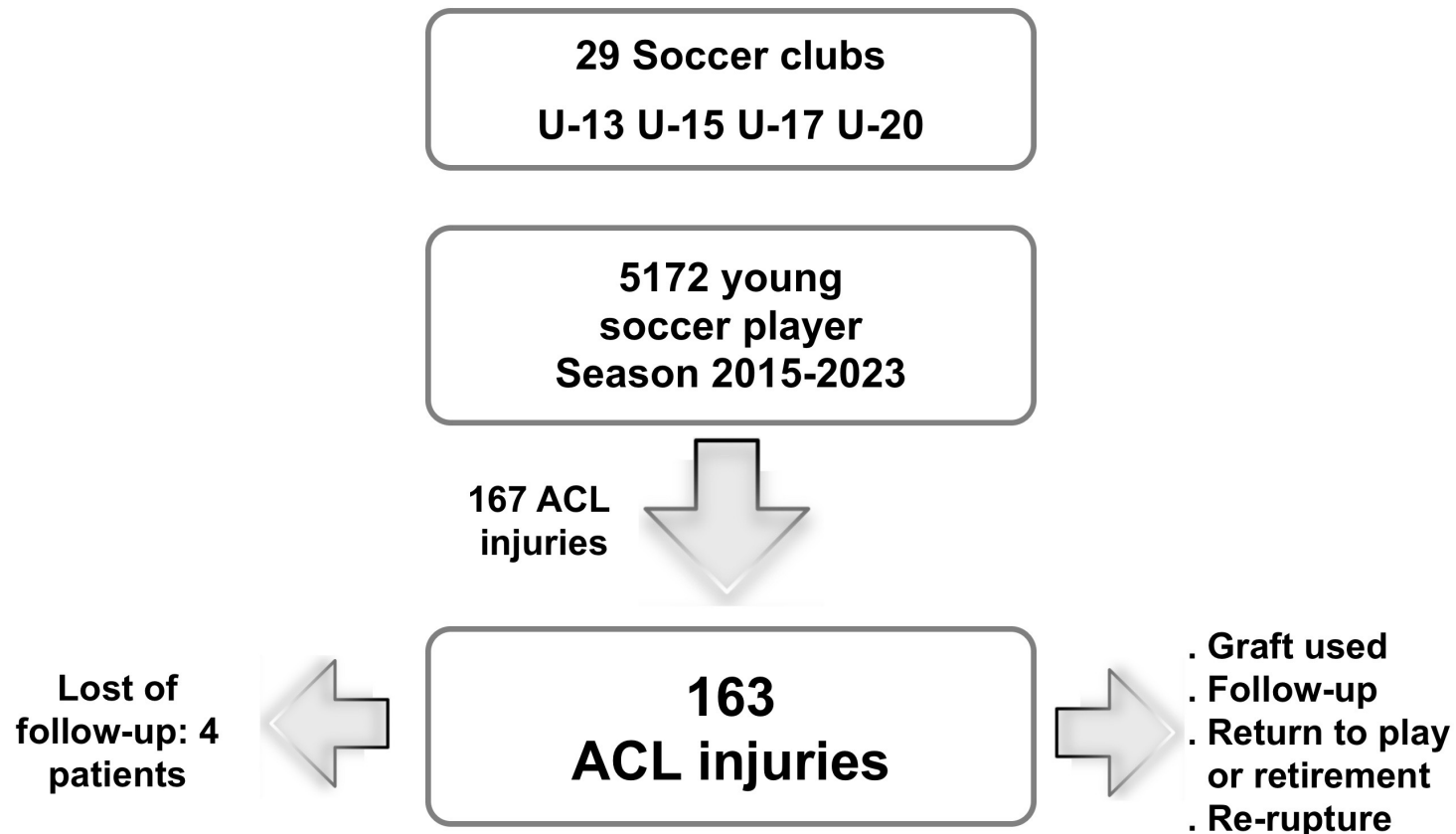
Are they retired ?



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METHODS

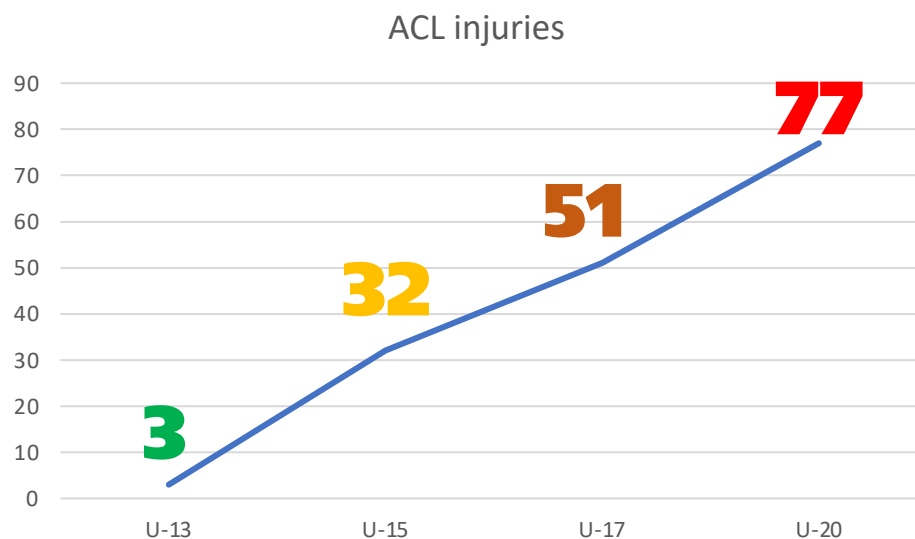


All ACL reconstruction patients included underwent **transphyseal reconstruction with autograft**, followed by rehabilitation before return to sport.

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RESULTS

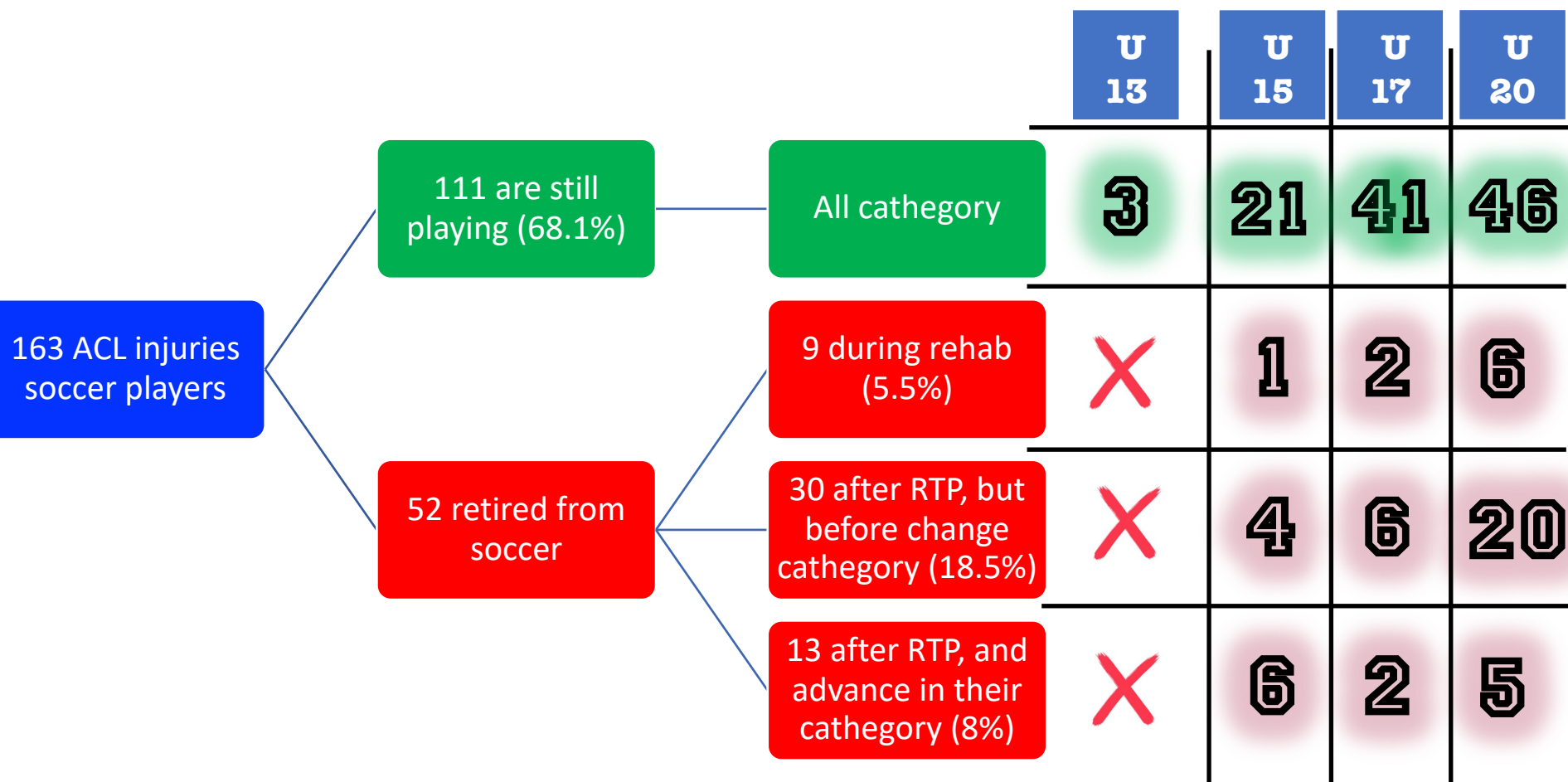


	U-13	U-15	U-17	U-20	Total	p
Players, n	91	925	1630	2526	5172	
Age (Average;min-max), yrs	12.3(12-13)	14.7(14-15)	16.6 (16-17)	18.8 (18-20)	17.2 (12-20)	<0.001
FU (still playing), yrs	2.3 (1-4)	2.9 (1-8)	2.4 (1-7)	2.7 (1-8)	2.7 (1-8)	0.5

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RESULTS



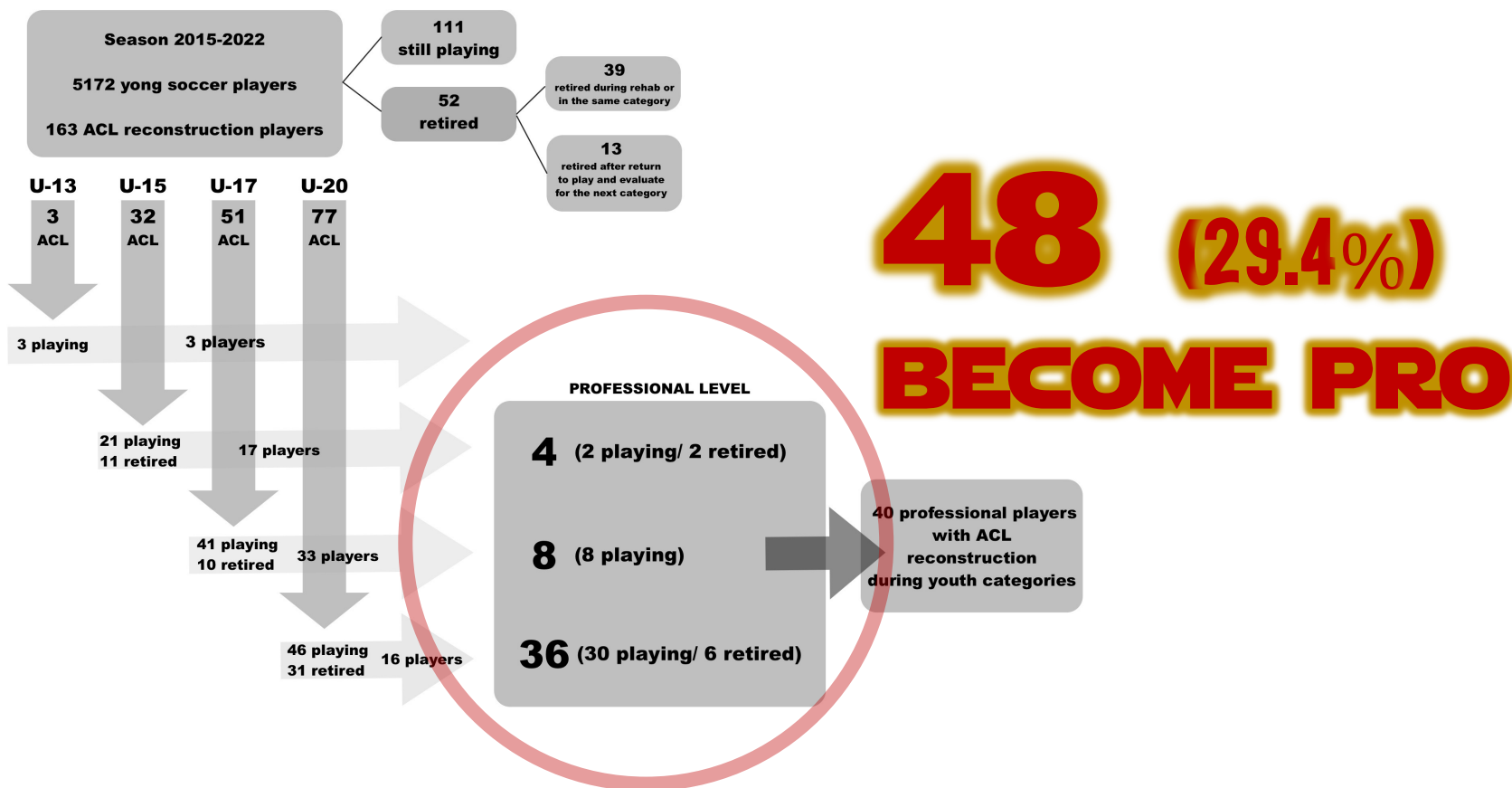
Graft Choice

RESULTS

- **Rates of continuation** of play were **similar** between **all graft types** (65.9-71.4%)
- **Hamstring tendon** autograft (77.3%) was more commonly used in the **younger age categories** (from 100 % in the U-13 to 73% in the U-20) ($p=0.005$)
- **No significant difference** of **graft choice** between those who **continued playing** vs those who **retired**. ($p=0.49$)

RESULTS

Athletes Who Reached the Adult Professional Level



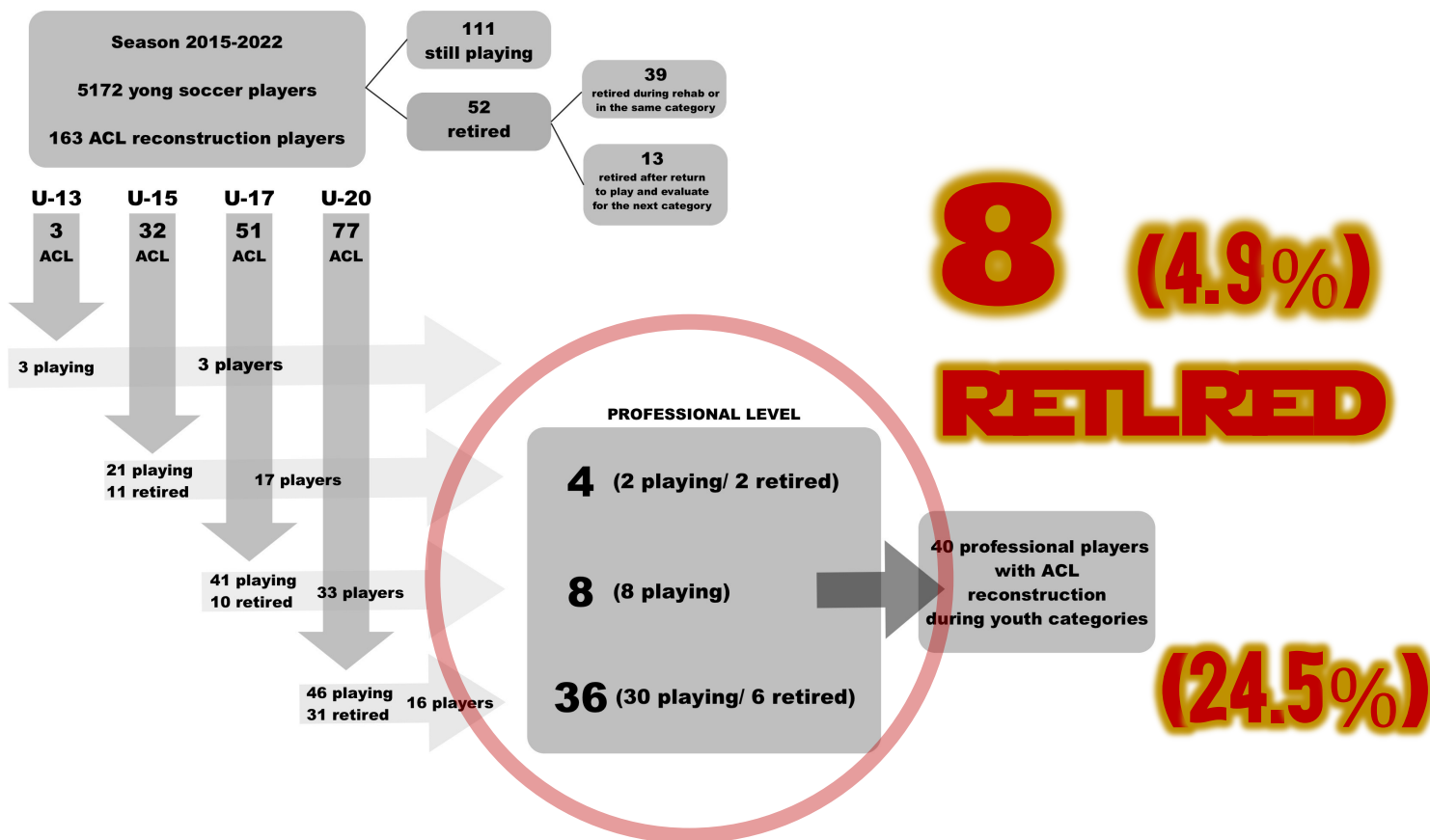
BUT

71 can still become professionals as they progress (43.6%)
(still in the younger categories – U-15; U-17; and U-20, but actively playing).

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RESULTS

Revision Surgeries

- **16 revisions (9.8%)/ 163 ACL reconstructions**

- **No significant difference**

1. among **age groups** and the **risk of revision**

surgery ($p=0.85$)

ACL revision	Retired	Still playing	Total
U-13	0	0	0
U-15	2(40%)	3(60%)	5 (17.2%)
U-17	1(25%)	3(75%)	4 (7.8%)
U-20	3(42.9%)	4(57.1%)	7 (9.1%)
TOTAL	6 (37.5%)	10 (62.5%)	16 (9.8%)

2. comparing **graft choice** to the **risk of ACL graft re-rupture** ($p=0.16$)

- **Significant association** between the **need for revision** and **retiring from sport**. ($p=0.006$)

CONCLUSION

Athletes from professional soccer teams who underwent ACL reconstruction while still playing in the youth teams of their clubs demonstrated:

- ✓ a return to sport rate of 68.1%

Among players who returned to sport and became adult league professionals:

- ✓ 40 (83.3%) continued to play at the adult professional level
- ✓ 8 (16.7%) have discontinued their careers.

Thank you

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SÃO PAULO

