Return to sport after ankle sprain

The Ankle-Go

A new score for return to sport after lateral ankle sprains

What are the targets of your patient ?

Which mandatory skills?

- Force ++
- CoD, landing ++
- Uneven ground++
- Plyométrics ++
- Double task ++

Halasi et al.*@AJSM* **2004**

TABLE 3
Ankle Activity Score

Category	Sports and Activities	Ankle Activity Score[a] T	C	R
10	American football	10	9	8
	Basketball	10	9	8
	Gymnastics	10	9	8
	Handball	10	9	8
	Rugby	10	9	8
	Soccer	10	9	8
9	Hockey	9	8	7
	Korfball	9	8	7
	Martial arts: judo, karate, kung fu, taekwondo	9	8	7
	Orienteering	9	8	7
	Rhythmic gymnastics	9	8	7
	Volleyball	9	8	7
8	Boxing	8	7	6
	Freestyle snowboarding	8	7	6
	Ice hockey	8	7	6
	Tennis	8	7	6
	Wrestling	8	7	6
7	Aerobics, fitness	7	6	5
	Badminton	7	6	5
	Baseball	7	6	5
	Cross-country running	7	6	5
	Modern pentathlon	7	6	5
	Squash	7	6	5
	Surfing, windsurfing	7	6	5
	Table tennis	7	6	5
	Track and field: field events	7	6	5
	Water skiing	7	6	5
6	Dancing	6	5	4
	Fencing	6	5	4
	Floorball	6	5	4
	Mountain and hill climbing	6	5	4
	Nordic skiing	6	5	4
	Parachuting	6	5	4
	Softball	6	5	4
	Special professions and working activities[b]	6		
5	Diving	5	5	4
	Scuba diving	5	5	4
	Skating, in-line skating	5	5	4
	Track and field: track events	5	5	4
	Triathlon	5	5	4
	Weightlifting, body building	5	5	4
	All competitive sports of categories 4 and 3 with seasonal conditioning	5		
	Heavy physical work	5		
4	Alpine skiing and snowboarding	4	4	4
	Bowling/curling	4	4	4
	Golf	4	4	4
	Mountain biking/bmx	4	4	4
	Power lifting	4	4	4
	Sailing	4	4	4
	Physical work	4		
3	Cycling	3	3	3
	Equestrian	3	3	3
	Motorsports, technical sports	3	3	3
	Rowing, kayaking	3	3	3
	Shooting, archery	3	3	3
	Water polo and swimming	3	3	3
	Able to walk on any uneven ground	3		
2	No sports, everyday activities not limited	2		
1	Able to walk on even ground, but everyday activities limited	1		
0	Unable to walk, disabled because of ankle problems	0		

[a]T, top level (international elite, professional, national team, or first division); C, lower competitive levels; R, recreational level (participation should be considered only if it exceeds 50 hours per year).
[b]Special professions include ballet dancer, professional soldier, special rescue worker, stuntman, and so forth.

2016 Consensus statement on return to sport from the First World Congress in Sports Physical Therapy, Bern

Clare L Ardern,[1,2,3] Philip Glasgow,[4,5] Anthony Schneiders,[6] Erik Witvrouw,[1,7] Benjamin Clarsen,[8,9] Ann Cools,[7] Boris Gojanovic,[10,11] Steffan Griffin,[12] Karim M Khan,[13] Håvard Moksnes,[8,9] Stephen A Mutch,[14,15] Nicola Phillips,[16] Gustaaf Reurink,[17] Robin Sadler,[18] Karin Grävare Silbernagel,[19] Kristian Thorborg,[20,21] Arnlaug Wangensteen,[1,8] Kevin E Wilk,[22] Mario Bizzini[23]

Return to Participation (RTP)

The athlete can take part in rehabilitation, training (modified or unrestricted) or sport, but at a lower level than their objective of returning to competition.

The athlete is physically active, but not yet "ready" (medically, physically and/or psychologically) for competition.

It is possible to train for performance, but this does not automatically mean a return to competition.

Ardern et al. *@BJSM* **2016**

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Retour to sport (RTS)

The athlete has returned to their defined sport, but is not achieving the desired level of performance.

Some athletes may be satisfied to reach this stage, and this may represent an RTS success for that individual.

Ardern et al. *@BJSM* **2016**

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Retour to Performance (RTPerf)

This extends the RTS element. The athlete has progressively returned to their defined sport and is at or above their pre-injury level.

For some athletes, this stage may be characterised by personal best performance or expected personal progression in performance.

Ardern et al. *@BJSM* **2016**

RTS *criteria* ??

Sports Medicine
https://doi.org/10.1007/s40279-019-01071-3

SYSTEMATIC REVIEW

Criteria-Based Return to Sport Decision-Making Following Lateral Ankle Sprain Injury: a Systematic Review and Narrative Synthesis

Bruno Tassignon[1] · Jo Verschueren[1] · Eamonn Delahunt[2,3] · Michelle Smith[4] · Bill Vicenzino[4] · Evert Verhagen[5] · Romain Meeusen[1]

There are currently ***no published evidence-based criteria to inform RTS decisions*** *for patients with an LAS injury.*

=> RTS decisions following LAS injury are ***generally time-based****.*

A timed base decision…

Journal of Science and Medicine in Sport 17 (2014) 23–28

Contents lists available at ScienceDirect

Journal of Science and Medicine in Sport

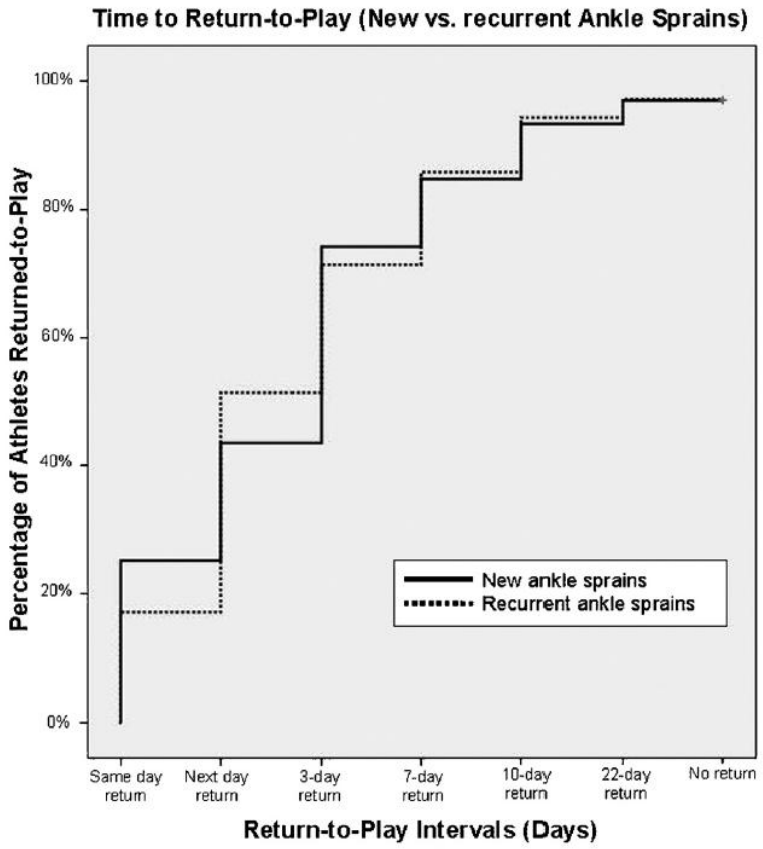
journal homepage: www.elsevier.com/locate/jsams

Original research

Return-to-play probabilities following new versus recurrent ankle sprains in high school athletes

Jennifer M. Medina McKeon[a,*], Heather M. Bush[b], Ashley Reed[a,c], Angela Whittington[a,d], Timothy L. Uhl[a], Patrick O. McKeon[a]

[a] Department of Rehabilitation Sciences, University of Kentucky, Lexington, KY, USA
[b] Department of Biostatistics, University of Kentucky, Lexington, KY, USA
[c] School of Health Sciences, Kent State University, Kent, OH, USA
[d] Wando High School, Mount Pleasant, SC, USA



*"median RTP for an ankle sprain for a high-school athlete is **approximately 1–3 days** regardless of injury history."*

McKeon et al. *@JSMS* **2014**

2016 Consensus statement on return to sport from the First World Congress in Sports Physical Therapy, Bern

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*"**premature RTS** may be one factor that contributes to the high prevalence of **recurrent ankle problems**.*

Ardern et al. *@BJSM* **2016.** Smith et al. *@BJSM* **2021**

1. INJURY MANAGEMENT

STAKEHOLDERS
clinicians, coaches, family organisation, management

ROLES
Definition, competence project leader identified

NEEDS
Assessment & management

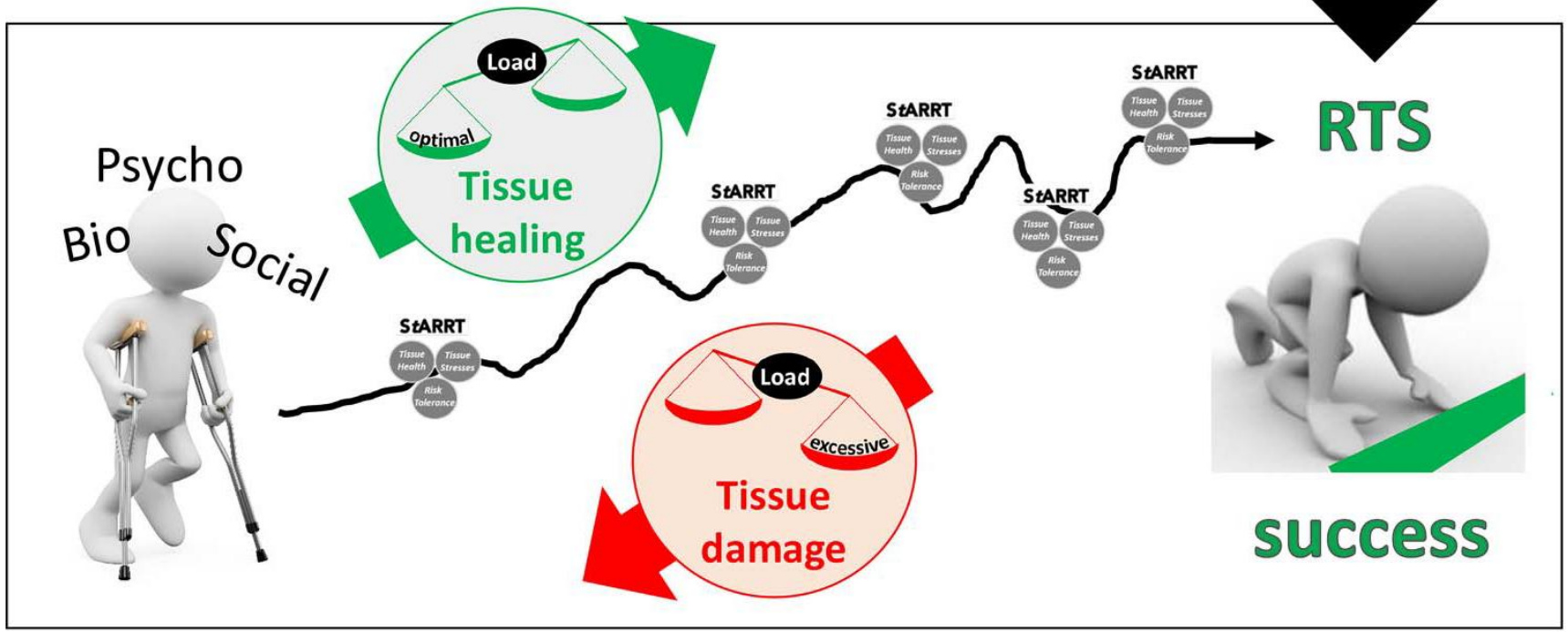
GOALS
SMART principles applied

MONITORING
Functional tests, health, well being, motivation

COMMUNICATION
Systematic, efficient, informative → all stakeholders

+ **StARRT**: *Tissue health*, *Tissue stresses*, *Risk tolerance* = **SHARED DECISION MAKING**

2. CLINICAL REHABILITATION



RTP criteria following LAS

DELPHI PROCESS INTERNATIONAL

Smith et al., **2020**

Original research

Return to sport decisions after an acute lateral ankle sprain injury: introducing the PAASS framework—an international multidisciplinary consensus

Michelle D Smith ,[1] Bill Vicenzino ,[1] Roald Bahr ,[2,3] Thomas Bandholm ,[4,5] Rosalyn Cooke ,[6] Luciana De Michelis Mendonça ,[7,8] François Fourchet,[9,10] Philip Glasgow,[11,12] Phillip A Gribble,[13] Lee Herrington,[6,14] Claire E Hiller ,[15] Sae Yong Lee,[16,17] Andrea Macaluso ,[18,19] Romain Meeusen,[20] Oluwatoyosi B A Owoeye ,[21,22] Duncan Reid,[23] Bruno Tassignon ,[20] Masafumi Terada ,[24] Kristian Thorborg ,[25,26] Evert Verhagen ,[27] Jo Verschueren,[20] Dan Wang,[28] Rod Whiteley ,[3,29] Erik A Wikstrom ,[30] Eamonn Delahunt [31,32]

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Establishing return to play criteria after acute lateral ankle sprain injuries: An international Delphi study

M. Smith • B. Vicenzino • R. Bahr • T. Bandholm • R. Cooke • L. Mendonça • F. Fourchet • P. Glasgow • P. Gribble • L. Herrington • C. Hiller • S. Lee • A. Macalusco • R. Meeusen • O. Oweye • D. Reid • B. Tassignon • M. Terada • K. Thorborg • E. Verhagen • J. Verschueren • D. Wang • R. Whiteley • E. Wikstrom • E. Delahunt • Show less

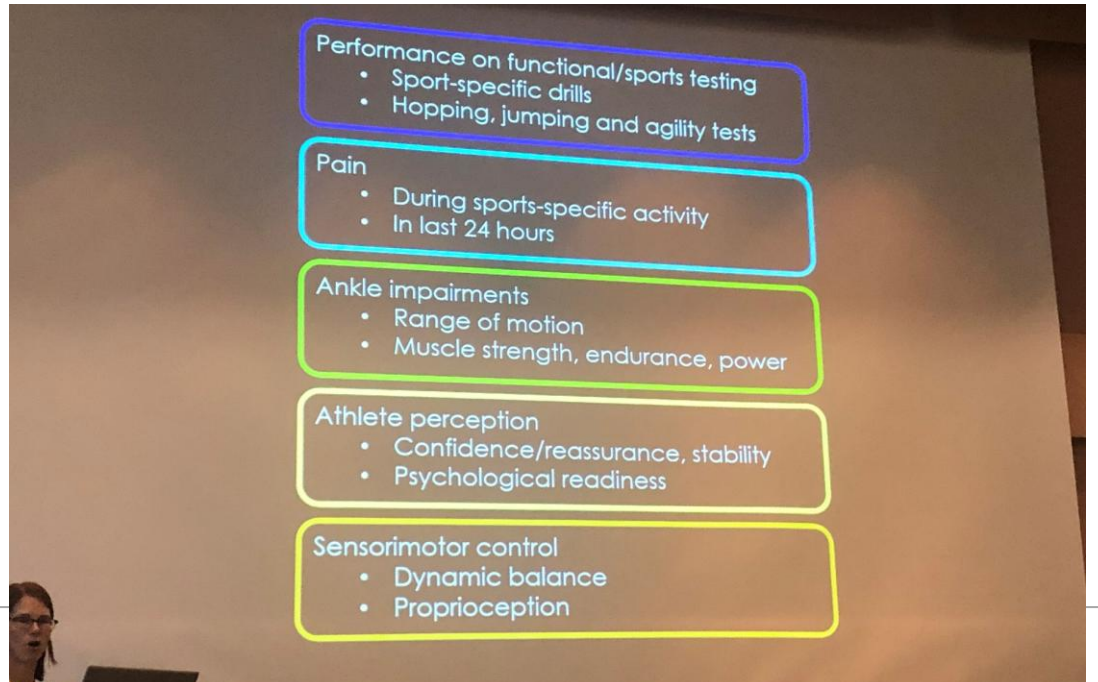
DOI: https://doi.org/10.1016/j.jsams.2019.08.147 • Check for updates

PlumX Metrics

8th International Ankle Symposium

Amsterdam 2019

Michelle Smith



Delphi survey in three stages

155 health professionals from all over the world working in elite or competitive sport.

3 surveys structured in the form of questions, with closed and open response questions.

"Experts were asked to indicate their agreement that the assessment evidence should or should not support the RTS decision after an acute lateral ankle sprain."

RTS criteria ??

P

Pain severity
- During sport participation
- Over last 24 hours

A

Ankle impairments
- Ankle range of motion
- Ankle muscle strength, endurance and power

A

Athlete perception
- Perceived ankle confidence/reassurance
- Perceived ankle stability
- Psychological readiness

S

Sensorimotor control
- Proprioception
- Dynamic postural control/balance

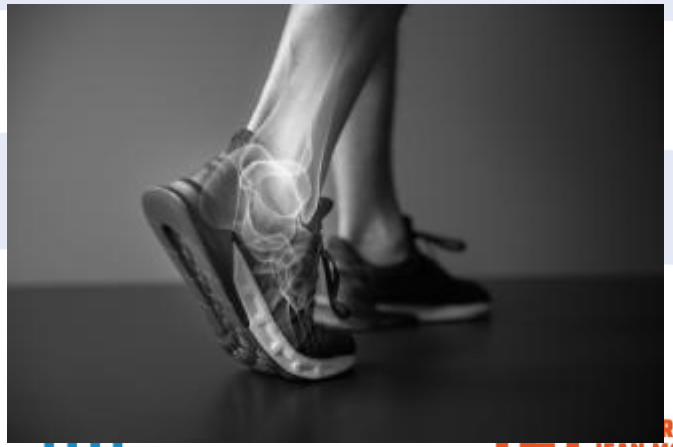
S

Sport/functional performance
- Hopping and jumping
- Agility
- Sport-specific activities
- Ability to complete a full training session

Original research

Return to sport decisions after an acute lateral ankle sprain injury: introducing the PAASS framework—an international multidisciplinary consensus

Michelle D Smith [1], Bill Vicenzino [1], Roald Bahr [2,3], Thomas Bandholm [4,5], Rosalyn Cooke [6], Luciana De Michelis Mendonça [7,8], François Fourchet [9,10], Philip Glasgow [11,12], Phillip A Gribble [13], Lee Herrington [6,14], Claire E Hiller [15], Sae Yong Lee [16,17], Andrea Macaluso [18,19], Romain Meeusen [20], Oluwatoyosi B A Owoeye [21,22], Duncan Reid [23], Bruno Tassignon [20], Masafumi Terada [24], Kristian Thorborg [25,26], Evert Verhagen [27], Jo Verschueren [20], Dan Wang [28], Rod Whiteley [3,29], Erik A Wikstrom [30], Eamonn Delahunt [31,32]



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Medical School Hamburg
University of Applied Sciences and Medical University

Smith et al. *@BJSM* 2021

Table 2 Consensus on assessment items that should be included in the return to sport decision after an acute lateral ankle sprain, indicating the round of inclusion and level of agreement

Assessment item to be included	Round (1–3)	Agreement (%)
Sport-specific activities	1	98
Pain severity during sport participation	1	93
Ankle range of motion	1	90
Ankle muscle strength	1	87
Hopping	1	87
Agility	1	87
Completion of a full training session	3	87
Jumping	1	84
Pain severity over the last 24 hours	1	81
Perceived ankle reassurance/confidence	1	81
Proprioception	1	74
Perceived ankle stability	1	74
Psychological readiness	1	74
Ankle muscle endurance	1	73
Dynamic postural control/balance	1	73
Ankle (and lower limb) muscle power*	2	72

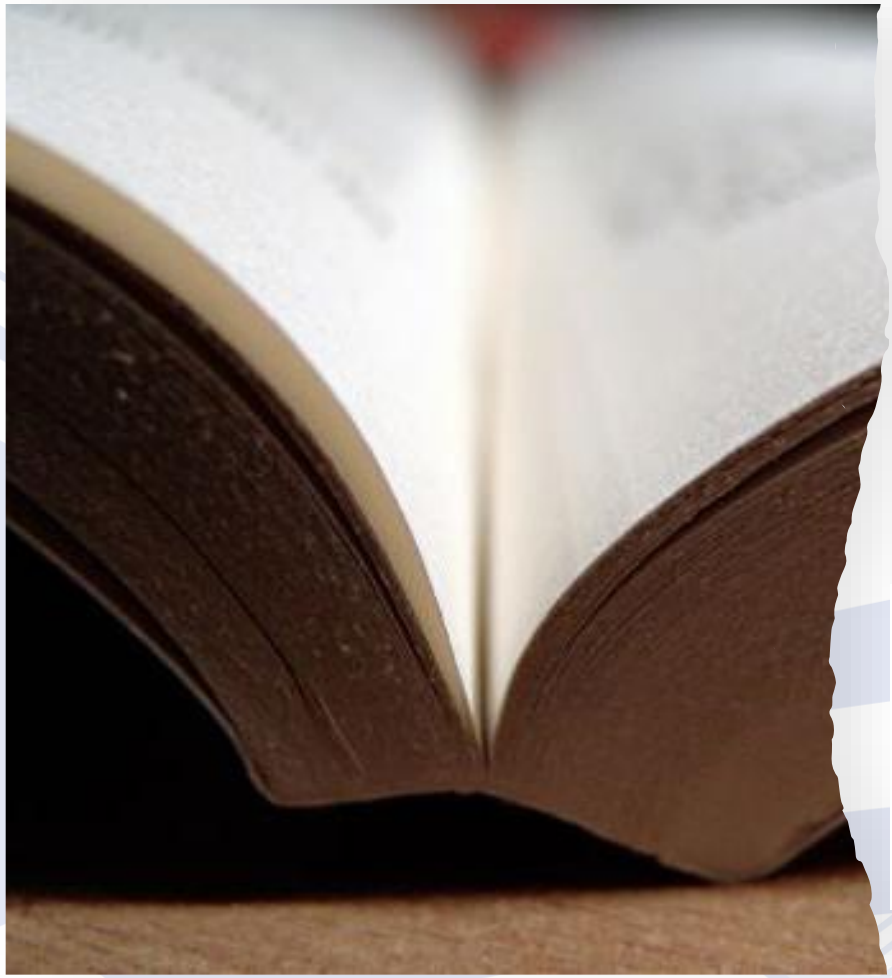
*Lower limb muscle power and ankle muscle power were initially presented to panellists as separate items, but 96% of panellists agreed that these items would be assessed together.

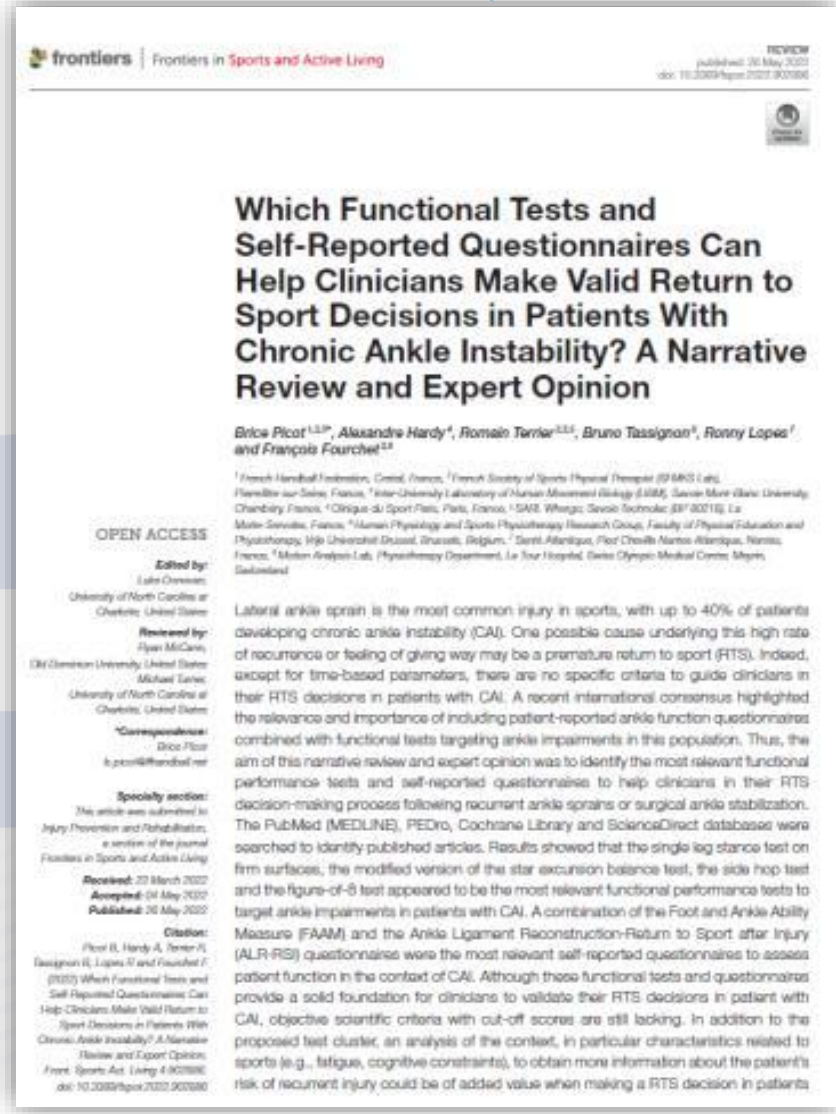
Table 3 Consensus on assessment items that should not be included in the return to sport decision after an acute lateral ankle sprain, indicating the round of exclusion and level of agreement

Assessment item not to be included	Round (1–3)	Agreement (%)
Structural integrity of the ligaments on imaging	2	89
Pain severity over the last week	3	88
Pain severity on palpation	3	88
Health-related quality of life	2	85
Hip and knee muscle endurance	3	85
Ankle muscle length	3	85
The Functional Movement Screen	2	84
Aerobic fitness	3	84
Anaerobic fitness	3	82
Ligamentous laxity	2	81
Ankle joint arthrokinematics	3	78
Ankle muscle reaction time	3	76
Acute:chronic workload	3	76
Lower limb and/or trunk kinematics	2	75
Hip and knee muscle strength	3	74
Foot biomechanics	2	74
Straight-line running speed	3	72
Patient-reported foot and ankle function (using questionnaires such as the Foot and Ankle Ability Measure[34] or Foot and Ankle Outcome Score[35])	3	70

EUROPEAN ATHLETICS

ATHLETICS MEDICINE CERTIFICATE





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REVIEW

Which Functional Tests and Self-Reported Questionnaires Can Help Clinicians Make Valid Return to Sport Decisions in Patients With Chronic Ankle Instability? A Narrative Review and Expert Opinion

Brice Picot[1,2,3*], Alexandre Hardy[4], Romain Terrier[2,3,5], Bruno Tassignon[6], Ronny Lopes[7] and François Fourchet[2,8]

OPEN ACCESS

Lateral ankle sprain is the most common injury in sports, with up to 40% of patients developing chronic ankle instability (CAI). One possible cause underlying this high rate of recurrence or feeling of giving way may be a premature return to sport (RTS). Indeed, except for time-based parameters, there are no specific criteria to guide clinicians in their RTS decisions in patients with CAI. A recent international consensus highlighted the relevance and importance of including patient-reported ankle function questionnaires combined with functional tests targeting ankle impairments in this population. Thus, the aim of this narrative review and expert opinion was to identify the most relevant functional performance tests and self-reported questionnaires to help clinicians in their RTS decision-making process following recurrent ankle sprains or surgical ankle stabilization. The PubMed (MEDLINE), PEDro, Cochrane Library and ScienceDirect databases were searched to identify published articles. Results showed that the single leg stance test on firm surfaces, the modified version of the star excursion balance test, the side hop test and the figure-of-8 test appeared to be the most relevant functional performance tests to target ankle impairments in patients with CAI. A combination of the Foot and Ankle Ability Measure (FAAM) and the Ankle Ligament Reconstruction-Return to Sport after Injury (ALR-RSI) questionnaires were the most relevant self-reported questionnaires to assess patient function in the context of CAI. Although these functional tests and questionnaires provide a solid foundation for clinicians to validate their RTS decisions in patient with CAI, objective scientific criteria with cut-off scores are still lacking. In addition to the proposed test cluster, an analysis of the context, in particular characteristics related to sports (e.g., fatigue, cognitive constraints), to obtain more information about the patient's risk of recurrent injury could be of added value when making a RTS decision in patients

Picot B., Hardy A., Terrier R., Tassignon B., Lopes R. et Fourchet F. *@Frontiers* **2022**

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EUROPEAN ATHLETICS

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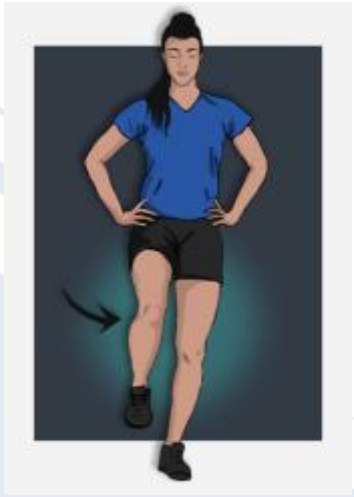
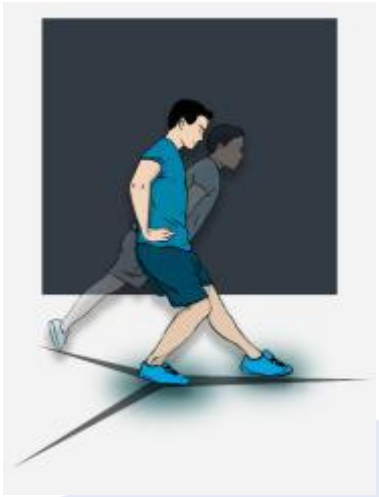
Which functional tests and self-reported questionnaires can help clinicians make valid return to sport decisions in patients with chronic ankle instability? A narrative review and expert opinion.

Brice Picot[1,2,3*], Alexandre Hardy[4], Romain Terrier[2,3,5], Bruno Tassignon[6], Ronny Lopes[7], François Fourchet[2,3,8]

Single Leg Stance (firm)



mSEBT



Side Hop Test

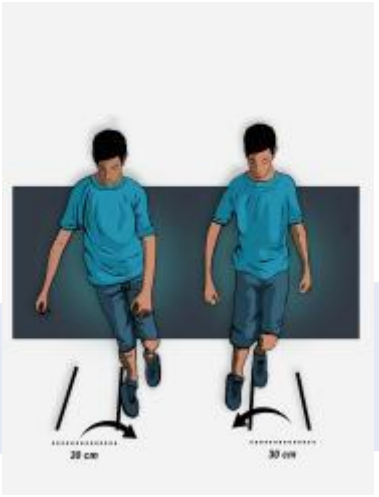
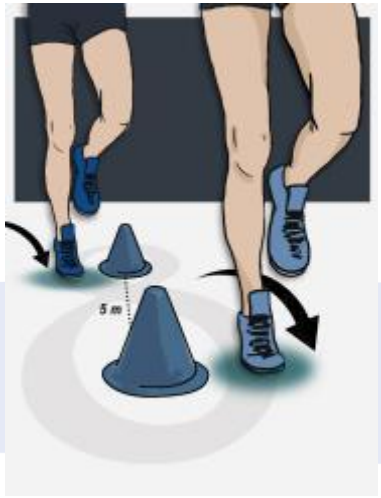


Figure of Eight



*Results showed that the **single leg stance test on firm surfaces**, the modified version of the **SEBT**, the **side hop test** and the **figure-of-8** test appeared to be the most relevant functional performance tests to target ankle impairments in patients with CAI.*

Picot B., Hardy A., Terrier R., Tassignon B., Lopes R. et Fourchet F. *@Frontiers* **2022**

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Foot and Ankle Ability Measure (FAAM)
Activities of Daily Living Subscale

Please Answer **every question** with **one response** that most closely describes your condition within the past week.
If the activity in question is limited by something other than your foot or ankle mark "Not Applicable" (N/A).

No Difficulty	Slight Difficulty	Moderate Difficulty	Extreme Difficulty	Unable to do	N/A

ALR-RSI scale

Please answer the following questions referring to your main sport prior to injury. For each question, tick a box □✓ between the two descriptions to indicate how you feel right now relative to the two extremes.

*A combination of the Foot and Ankle Ability Measure (**FAAM**) and the Ankle Ligament Reconstruction-Return to Sport after Injury(**ALR-RSI**) questionnaires were the most relevant self-reported questionnaires to assess patient function in the context of CAI.*

Picot B., Hardy A., Terrier R., Tassignon B., Lopes R. et Fourchet F. *@Frontiers* **2022**

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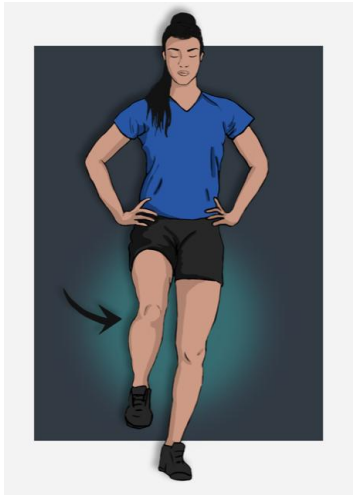
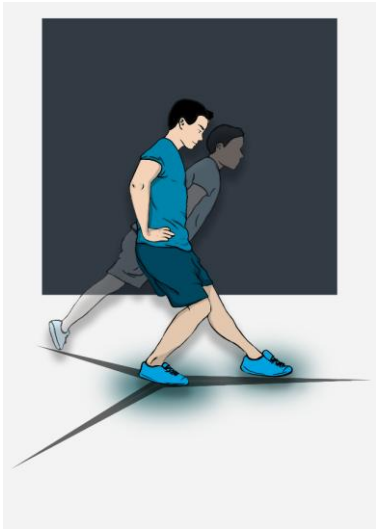
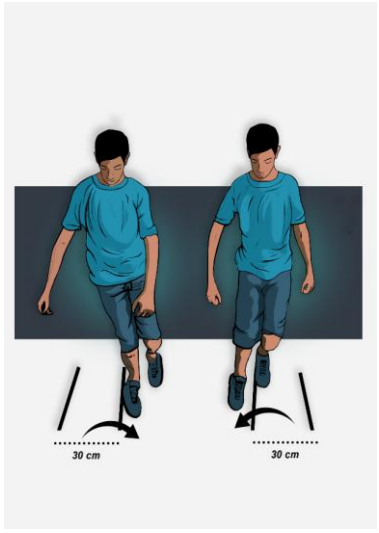
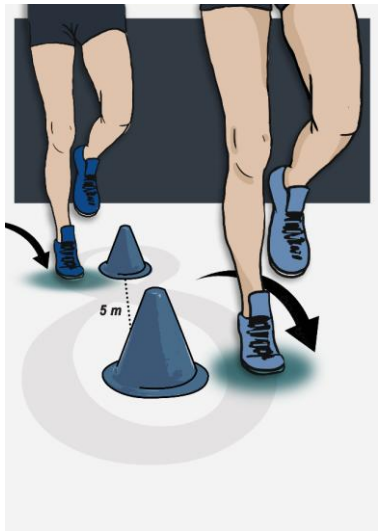
Ankle Go test…









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REVIEW
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Brice Picot[1,2,3], Alexandre Hardy[4], Romain Terrier[2,3,5], Bruno Tassignon[6], Ronny Lopes[7] and François Fourchet[2,8]*

[1] French Handball Federation, Creteil, France, [2] French Society of Sports Physical Therapist (SFMKS Lab), Pierrefitte-sur-Seine, France, [3] Inter-University Laboratory of Human Movement Biology (LIBM), Savoie Mont-Blanc University, Chambéry, France, [4] Clinique du Sport Paris, Paris, France, [5] SARL Whergo, Savoie Technolac (BP 80218), La Motte-Servolex, France, [6] Human Physiology and Sports Physiotherapy Research Group, Faculty of Physical Education and Physiotherapy, Vrije Universiteit Brussel, Brussels, Belgium, [7] Santé Atlantique, Pied Cheville Nantes Atlantique, Nantes, France, [8] Motion Analysis Lab, Physiotherapy Department, La Tour Hospital, Swiss Olympic Medical Center, Meyrin, Switzerland

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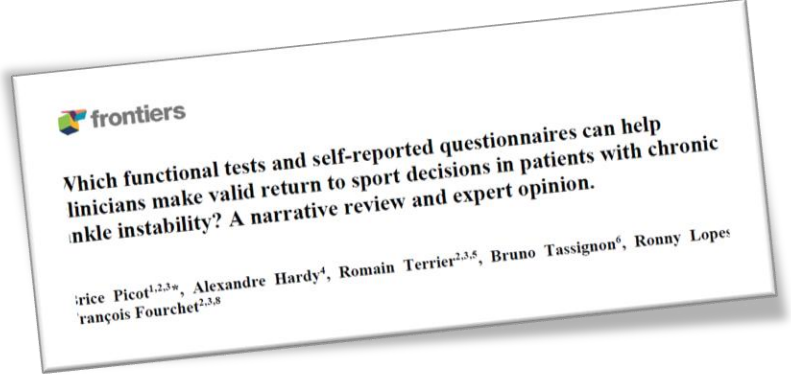
Lateral ankle sprain is the most common injury in sports, with up to 40% of patients developing chronic ankle instability (CAI). One possible cause underlying this high rate of recurrence or feeling of giving way may be a premature return to sport (RTS). Indeed, except for time-based parameters, there are no specific criteria to guide clinicians in their RTS decisions in patients with CAI. A recent international consensus highlighted the relevance and importance of including patient-reported ankle function questionnaires combined with functional tests targeting ankle impairments in this population. Thus, the aim of this narrative review and expert opinion was to identify the most relevant functional performance tests and self-reported questionnaires to help clinicians in their RTS decision-making process following recurrent ankle sprains or surgical ankle stabilization. The PubMed (MEDLINE), PEDro, Cochrane Library and ScienceDirect databases were searched to identify published articles. Results showed that the single leg stance test on firm surfaces, the modified version of the star excursion balance test, the side hop test and the figure-of-8 test appeared to be the most relevant functional performance tests to target ankle impairments in patients with CAI. A combination of the Foot and Ankle Ability Measure (FAAM) and the Ankle Ligament Reconstruction-Return to Sport after Injury (ALR-RSI) questionnaires were the most relevant self-reported questionnaires to assess patient function in the context of CAI. Although these functional tests and questionnaires provide a solid foundation for clinicians to validate their RTS decisions in patient with CAI, objective scientific criteria with cut-off scores are still lacking. In addition to the proposed test cluster, an analysis of the context, in particular characteristics related to sports (e.g., fatigue, cognitive constraints), to obtain more information about the patient's risk of recurrent injury could be of added value when making a RTS decision in patients

Ankle GO test…


frontiers

Which functional tests and self-reported questionnaires can help clinicians make valid return to sport decisions in patients with chronic ankle instability? A narrative review and expert opinion.

Picot[1,2,3]*, Alexandre Hardy[4], Romain Terrier[2,3,5], Bruno Tassignon[6], Ronny Lopes, François Fourchet[2,3,8]

Outcomes	Proposed cut off score	MDC	MCID
Functional performance testing			
Single Leg Stance on firm surface	< 3 errors	0.6 errors	NR
Foot lift Test	< 5 lifts	3 errors	NR
Star Excursion Balance Test (normalized to the leg length) Composite score (COMP) Anterior (ANT) Posteromedial (PM) Posterolateral (PL)	 COMP >90% ANT asymmetry <4.5% or 4cm PM >91% PL >91%	 COMP = 6.7% ANT =5.87% PM =7.84% PL =7.55%	NR
Side Hop Test (44)	<10s	5.82s	NR
Figure-of-8 Hop Test (44)	<12s	4.59s	NR

Picot et al. *@Frontiers* **2022**

Single leg stance

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- Participants stand barefoot on the tested limb, look straight ahead and are then instructed to keep their **eyes closed and their hands on their hips for 20s.**

- The test must be performed with the weight-bearing leg at **~5◦ of knee flexion** and with the hip and knee of the **non-weight-bearing limb slightly flexed.**

- The examiner counts the number of **balance errors** that occur during the test.

ICC= 0.93 and SEM of 0.45 with a MDC of 0.6 errors

Familiarization is allowed with several practice trials before performing the test. The total number of errors committed in the trial of each leg are used for analysis

Riemann et al.**1999,** Linens et al. **2014**

Single leg stance

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Score calculation (/3)

- > 3errors = 0
- 1-3 errors = 1
- 0 errors = 2

TABLE 2 | Single leg stance test on firm surface derived from the Balance Error Scoring System (BESS).

Balance errors assessed by the examiner
Lifting hands off iliac crest
Opening eyes
Stepping, stumbling or falling
Moving hip into more than 30° of flexion or abduction
Lifting forefoot or heel
Remaining out of the test position more than 5 s

- If the patient does not report feelings of instability during the test : + 1

ICC= 0.93 and SEM of 0.45 with a MDC of 0.6 errors

FIGURE 1 | Single leg stance on firm surface or foot lift test of the left limb.

Riemann et al.**1999,** Linens et al. **2014**

Star Excursion Balance Test

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Score calculation (/7):

- COMP score:
  - < 90% = 0
  - 90-95% = 2
  - > 95% = 4
- ANT score ≥ 60% : +1
- PM score ≥ 90% : + 1
- If the patient does not report feelings of instability during the test: + 1

Table 1 2021 Updated Recommendations for the SEBT Procedure

Important criteria	Recommendations
Number of directions	Three (ANT, PM, and PL) representing a "Y" instead of eight.[13,16,31] See the proposed compact versions (Figure 3).
Setup of the test	Demonstration prior to the test by the experimenter (or video).[7,17]
Number of familiarization trials	Four in each direction for both limbs, until familiarization with procedure.[7,17]
Number of recorded trials	Three per direction.[7,17] *Performances should be stabilized*. Switch from one leg to the other between each direction to avoid fatigue.[18]
Hand position	Hands should remain on the hips to target lower limb performance. [14,21]
Foot placement	Barefoot (or socks), the most distal aspect of the great toe on 0 (crossroad of three lines) during the entire procedure. Need to be standardized across studies. This method avoids possible foot placement errors.[14]
Failure criteria	(a) Subject falls or loses his/her balance (the reaching foot touch the ground). (b) Subject shifts his/her weight on the reach limb when contacting the floor or contacts the floor at multiple times or miss the tape measure. (c) Stance foot moves or heel rises or any part of the foot lifts from the ground. (d) Hands are removed from the hips.
Parameter	(a) Mean of the three trials for each direction and limb.[46] (b) Calculation of the composite score (mean of three directions) for normalized (in percentage) and nonnormalized (in centimeters) scores. (c) Qualitative analysis of the movement.[56,57]
Limb length normalization	Scores are expressed as a percentage of the tested lower limb length (*from ASIS to medial malleolus preferably*, or lateral malleolus).[21]

Note. ASIS = anterior and superior iliac spine; ANT = anterior; PL = posterolateral; PM = posteromedial; SEBT = Star Excursion Balance Test.

FIGURE 2 | Star excursion balance test of the right limb.

*ICC values were **0.88** (0.83–0.96), **0.87** (0.80–1.0), and **0.88** (0.73–1.0) for the anterior (ANT), posteromedial (PM) and posterolateral (PL) directions, respectively. MDC were 5.9%, 7.8%, and 7.6% for ANT, PM, and PL directions respectively*

Picot et al. **2021,** Gribble et al. **2012**, Attenborough et al. **2017**, De noronha et al. **2012**, Linens et al. **2014,** Rosen et al. **2017**

Side Hop Test

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Score calculation (/5):

- >13s = 0
- 10 -13s = 2
- < 10 s = 4

If the patient does not report feelings of instability during the test : + 1

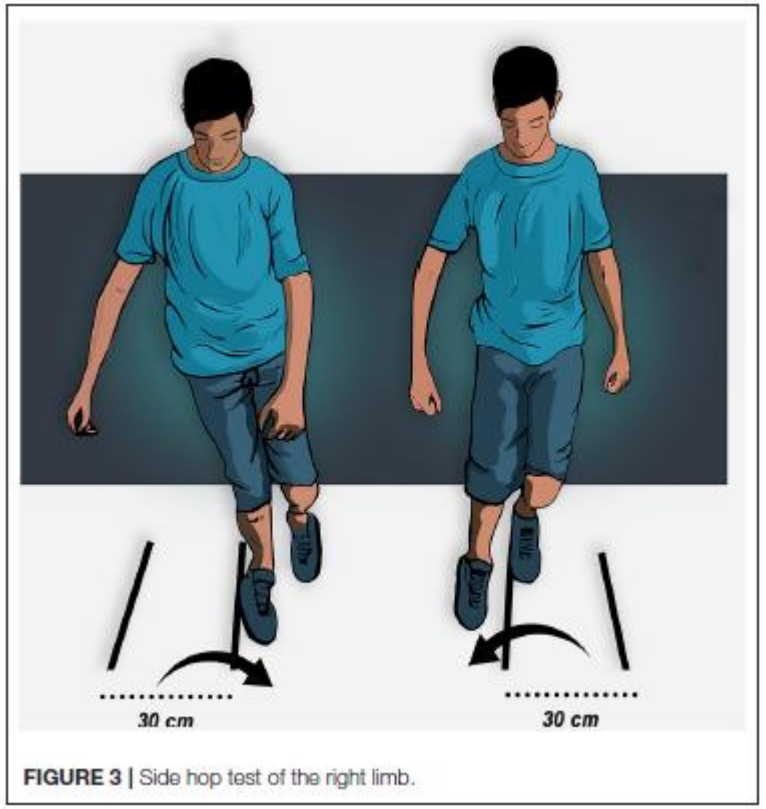

FIGURE 3 | Side hop test of the right limb.

ICC= 0.84 and SEM of 2.1s with a MDC of 5.8s

Itoh et al. **1989,** Docherty et al. **2005**, Linens et al. **2014**

Figure of 8

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Score calculation (/3):

- > 18s = 0
- 13 -18s = 1
- < 13 s = 2

If the patient does not report feelings of instability during the test : + 1

ICC= 0.95 and SEM of 1.7s with a MDC of 4.6s

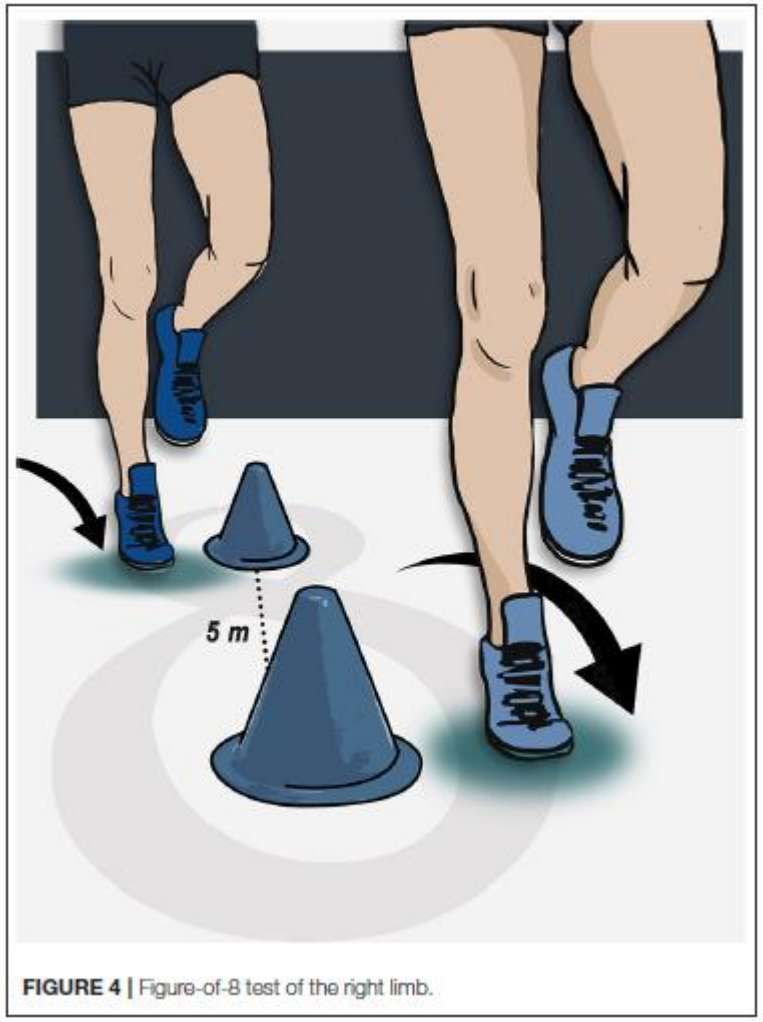

FIGURE 4 | Figure-of-8 test of the right limb.

Caffrey et al. **2009,** Docherty et al. **2005**, Linens et al. **2014**

$FAAM_{ADL}$ & $FAAM_{sport}$

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Score calculation (/4):

- $FAAM_{ADL}$

< 90 % ADL = 0

90- 95 % ADL = 1

95 % ADL = 2

- $FAAM_{sport}$

< 80 % sport = 0

80- 95 % sport = 1

95 % sport = 2

Foot and Ankle Ability Measure (FAAM)
Activities of Daily Living Subscale

Please Answer **every question** with **one response** that most closely describes your condition within the past week.
If the activity in question is limited by something other than your foot or ankle mark "Not Applicable" (N/A).

	No Difficulty	Slight Difficulty	Moderate Difficulty	Extreme Difficulty	Unable to do	N/A
Standing	☐	☐	☐	☐	☐	☐
Walking on even Ground	☐	☐	☐	☐	☐	☐
Walking on even ground without shoes	☐	☐	☐	☐	☐	☐
Walking up hills	☐	☐	☐	☐	☐	☐
Walking down hills	☐	☐	☐	☐	☐	☐
Going up stairs	☐	☐	☐	☐	☐	☐
Going down stairs	☐	☐	☐	☐	☐	☐
Walking on uneven ground	☐	☐	☐	☐	☐	☐
Stepping up and down curbs	☐	☐	☐	☐	☐	☐
Squatting	☐	☐	☐	☐	☐	☐
Coming up on your toes	☐	☐	☐	☐	☐	☐

ICC= 0.89 with a MCID of 8 pts

Foot and Ankle Ability Measure (FAAM)
Sports Subscale

Because of your foot and ankle how much difficulty do you have with:

	No Difficulty at all	Slight Difficulty	Moderate Difficulty	Extreme Difficulty	Unable to do	N/A
Running	☐	☐	☐	☐	☐	☐
Jumping	☐	☐	☐	☐	☐	☐
Landing	☐	☐	☐	☐	☐	☐
Starting and stopping quickly	☐	☐	☐	☐	☐	☐
Cutting/lateral Movements	☐	☐	☐	☐	☐	☐
Ability to perform Activity with your Normal technique	☐	☐	☐	☐	☐	☐
Ability to participate In your desired sport As long as you like	☐	☐	☐	☐	☐	☐

ICC= 0.87 with a MCID of 9 pts

Martin et al. **2005,** Carcia et al. **2008,** Borloz et al. **2011,** Hertel et Corbett **2019**

Score calculation (/3):

< 55 % = 0

55 – 63 % = 1

64 – 76 % = 2

>76 % = 3

ICC= 0.92 with a MDC of 13,5%

ALR-RSI scale

Please answer the following questions referring to your main sport prior to injury. For each question, tick a box □✓ between the two descriptions to indicate how you feel right now relative to the two extremes.

1.Are you confident that you can perform at your previous level of sport participation?

Not at all confident □ □ □ □ □ □ □ □ □ □ □ Fully confident

0 1 2 3 4 5 6 7 8 9 10

2.Do you think you are likely to re-injure your ankle by participating in your sport?

Extremely likely □ □ □ □ □ □ □ □ □ □ □ Not likely at all

0 1 2 3 4 5 6 7 8 9 10

3.Are you nervous about playing your sport?

Extremely nervous □ □ □ □ □ □ □ □ □ □ □ Not nervous at all

0 1 2 3 4 5 6 7 8 9 10

4.Are you confident that your ankle will not give way by playing your sport?

Not at all confident □ □ □ □ □ □ □ □ □ □ □ Fully confident

0 1 2 3 4 5 6 7 8 9 10

5.Are you confident that you could play your sport without concern for your ankle?

Not at all confident □ □ □ □ □ □ □ □ □ □ □ Fully confident

0 1 2 3 4 5 6 7 8 9 10

6.Do you find it frustrating to have to consider your ankle with respect to your sport?

Extremely frustrating □ □ □ □ □ □ □ □ □ □ □ Not at all frustrating

0 1 2 3 4 5 6 7 8 9 10

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7.Are you fearful of re-injuring your ankle by playing your sport?

Extremely fearful □ □ □ □ □ □ □ □ □ □ □ No fear at all

0 1 2 3 4 5 6 7 8 9 10

8.Are you confident about your ankle holding up under pressure?

Not at all confident □ □ □ □ □ □ □ □ □ □ □ Fully confident

0 1 2 3 4 5 6 7 8 9 10

9.Are you afraid of accidentally injuring your ankle by playing your sport?

Extremely afraid □ □ □ □ □ □ □ □ □ □ □ Not at all afraid

0 1 2 3 4 5 6 7 8 9 10

10. Do thoughts of having to go through surgery and rehabilitation prevent you from playing your sport?

All of the time □ □ □ □ □ □ □ □ □ □ □ None of the time

0 1 2 3 4 5 6 7 8 9 10

11. Are you confident about your ability to perform well at your sport?

Not at all confident □ □ □ □ □ □ □ □ □ □ □ Fully confident

0 1 2 3 4 5 6 7 8 9 10

12. Do you feel relaxed about playing your sport?

Not at all relaxed □ □ □ □ □ □ □ □ □ □ □ Fully relaxed

0 1 2 3 4 5 6 7 8 9 10

Pioger et al. @KSSTA **2022**, Sigonney et al. @KSSTA **2020**

	TESTS		RAW VALUES	POINTS	MAXIMUM SCORE
FUNCTIONAL PERFORMANCE TESTING	Single leg stance test		> 3 errors	0	3
			1 - 3 errors	1	
			0 error	2	
			No apprehension	+1	
	Star excursion balance test (SEBT)		< 90%	0	7
			90 - 95%	2	
			> 95%	4	
			Anterior (ANT) > 60 %	+1	
			Posteromedial (PM) > 90 %	+1	
			No apprehension	+1	
	Side hop test		> 13 s	0	5
			10 - 13 s	2	
			< 10 s	4	
			No apprehension	+1	
	Figure-of-8 hop test		> 18 s	0	3
			13 - 18 s	1	
			< 13 s	2	
			No apprehension	+1	
PATIENT REPORTED OUTCOME MEASURE	Foot and Ankle Ability Measure (FAAM)	Activities of Daily Living	< 90 %	0	2
			90 – 95 %	1	
			> 95 %	2	
		Sport	< 80 %	0	2
			80 – 95 %	1	
			> 95 %	2	
	Ankle ligament reconstruction-return to sport after injury (ALR-RSI)		< 55 %	0	3
			55-63 %	1	
			63 – 76 %	2	
			> 76 %	3	
Ankle-GO					25

Prospective cohort

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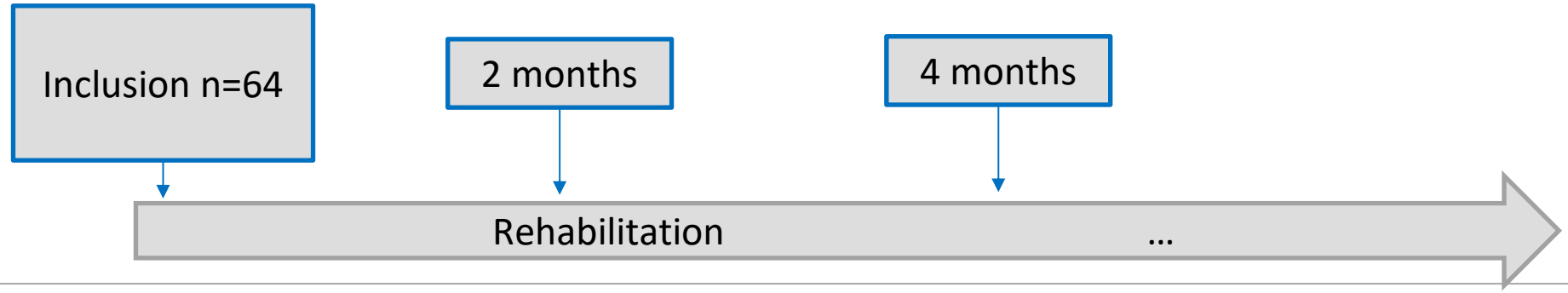
n=64	2 months			4 months		
	Same level (n=0)	Lower level (n=15)	No sport (n=49)	Same level (n=32)	Lower level (n=20)	No sport (n=12)
ANKLE GO	-	10.3±3.6§	7.1±4.1	17.2±3.5**	12.4±4.1	9.3±3
FAAM$_{adl}$ (%)	-	92.1±5.4§	82.9	96.8±4.4**	92.4±5.9§	86.2±10.5
FAAM$_{sport}$ (%)	-	73.8±13.1	55.4±22.9	89.3±10.4**	75.9±17§	62.5±19.4
ALR RSI (%)	-	60.3±13.8§§	40.3±21	80.9±15.5**	58.8±18.1	50.4±21
SLS (errors)	-	2.7±2.5	3.7±3	1.6±1.9	1.9±1.8	2.2±1.8
mSEBT COMP (%)	-	84.6±6.4§	78.7±7	86.8±6.5*	83.7±7	81.4±7
SHT (s)	-	20.4±9.6	22.6±11.5	11.3±3.8*	14.3±7.4	16.8±5.6
F8T (s)	-	17±5	22.1±10	12.5±2.5*	14.5±4.8	17.1±6.9



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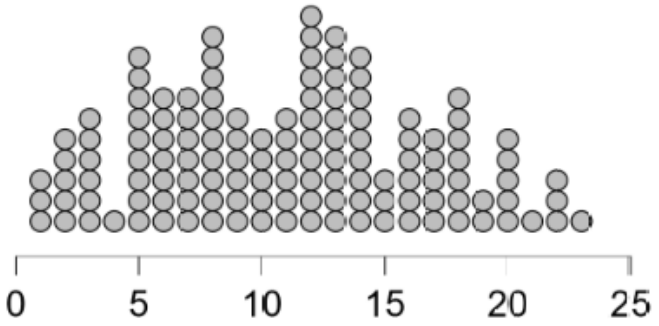
- ✓ $FAAM_{avq}$ **/2pts**
- ✓ $FAAM_{sport}$ **/2pts**
- ✓ ALR-RSI **/3pts**
- ✓ Single Leg Stance **/3pts**
- ✓ Star Excursion Balance Test **/7pts**
- ✓ Side Hop Test **/5pts**
- ✓ Figure of 8 Test **/3pts**

	Healthy (n=30)
ANKLE GO (pts)	**19.6 ±3.4**
$FAAM_{adl}$ (%)	99.8 ±0.5
$FAAM_{sport}$ (%)	98.9 ±2.2
ALR-RSI (%)	96 .1±5.2
SLS (errors)	1.2 ±1.4
mSEBT COMP (%)	91.9 ±6.7
SHT (s)	11.6 ±2.7
F8T (s)	11.7 ±2.2

➔ **Total score Ankle-GO:** **/25points**

B Picot, R Lopes, G Rauline, F Fourchet et A Hardy, *in submission*

Preliminary results



Inter-Item Correlation Matrix

	SLS	SEBT	SHT	F8T	$FAAM_{adl}$	$FAAM_{sport}$	ALR RSI	Cronbach's alpha if item deleted	Correlation with total score
SLS	-							.760	.480
SEBT	.281	-						.730	.683
SHT	.311	.354	-					.712	.765
F8T	.355	.424	.671	-				.729	.804
$FAAM_{adl}$	.298	.383	.389	.467	-			.744	.696
$FAAM_{sport}$	.076	.263	.271	.397	.600	-		.755	.607
ALR RSI	.128	.385	.382	.494	.437	.608	-	.730	.714
ANKLE GO	.480	.683	.765	.804	.696	.607	.714	-	-

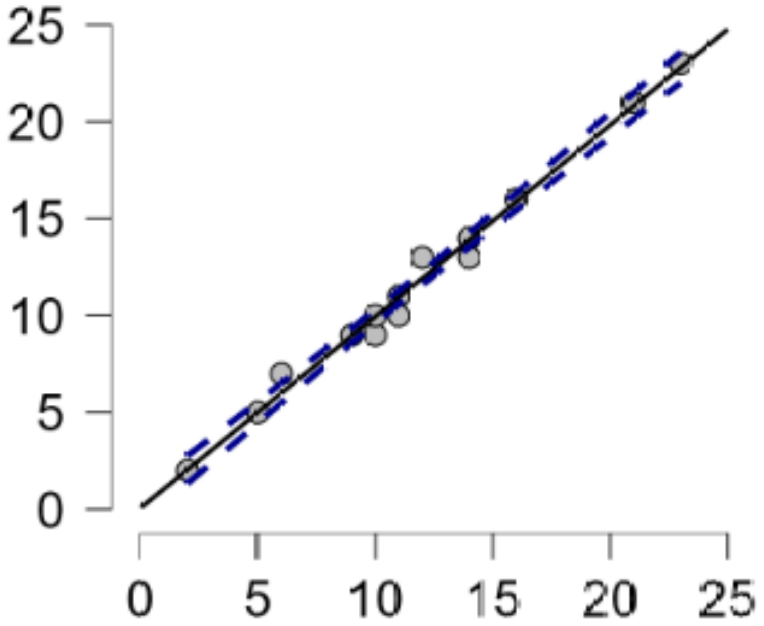
Cronbach's alpha = **0.79**

Floor and Ceiling effect, Internal consistency & construct validity

B Picot, R Lopes, G Rauline, F Fourchet et A Hardy, *in submission*

Preliminary results

Test Retest: ICC=**0.99** with a **SEM of 0.41pts** and **MDC of 1.2pts**

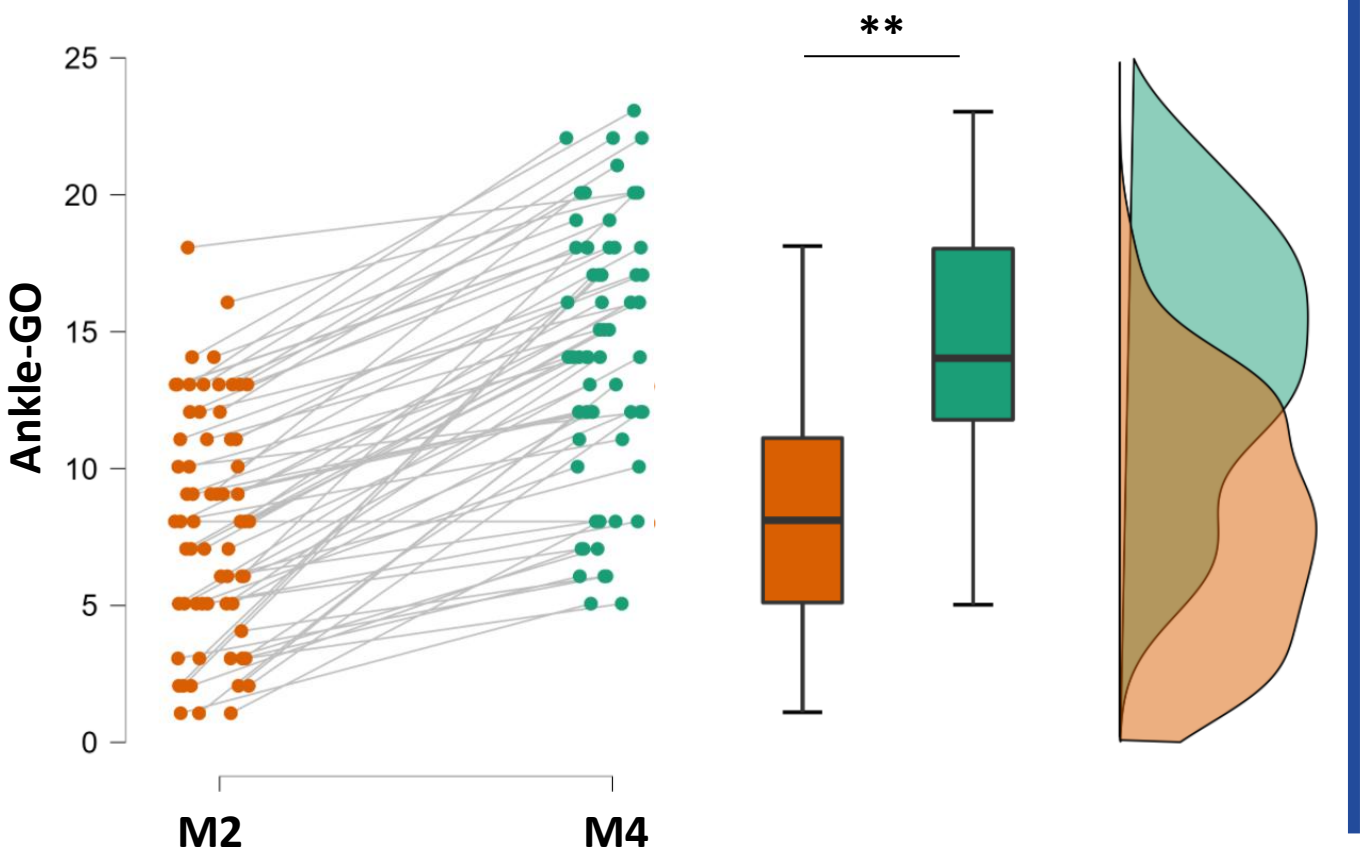


Test re-test reliability

B Picot, R Lopes, G Rauline, F Fourchet et A Hardy, *in submission*

Preliminary results

(7.8 ± 4.2 vs 14.2 ± 4.8, $p<0.001$; $d = -1.899$)

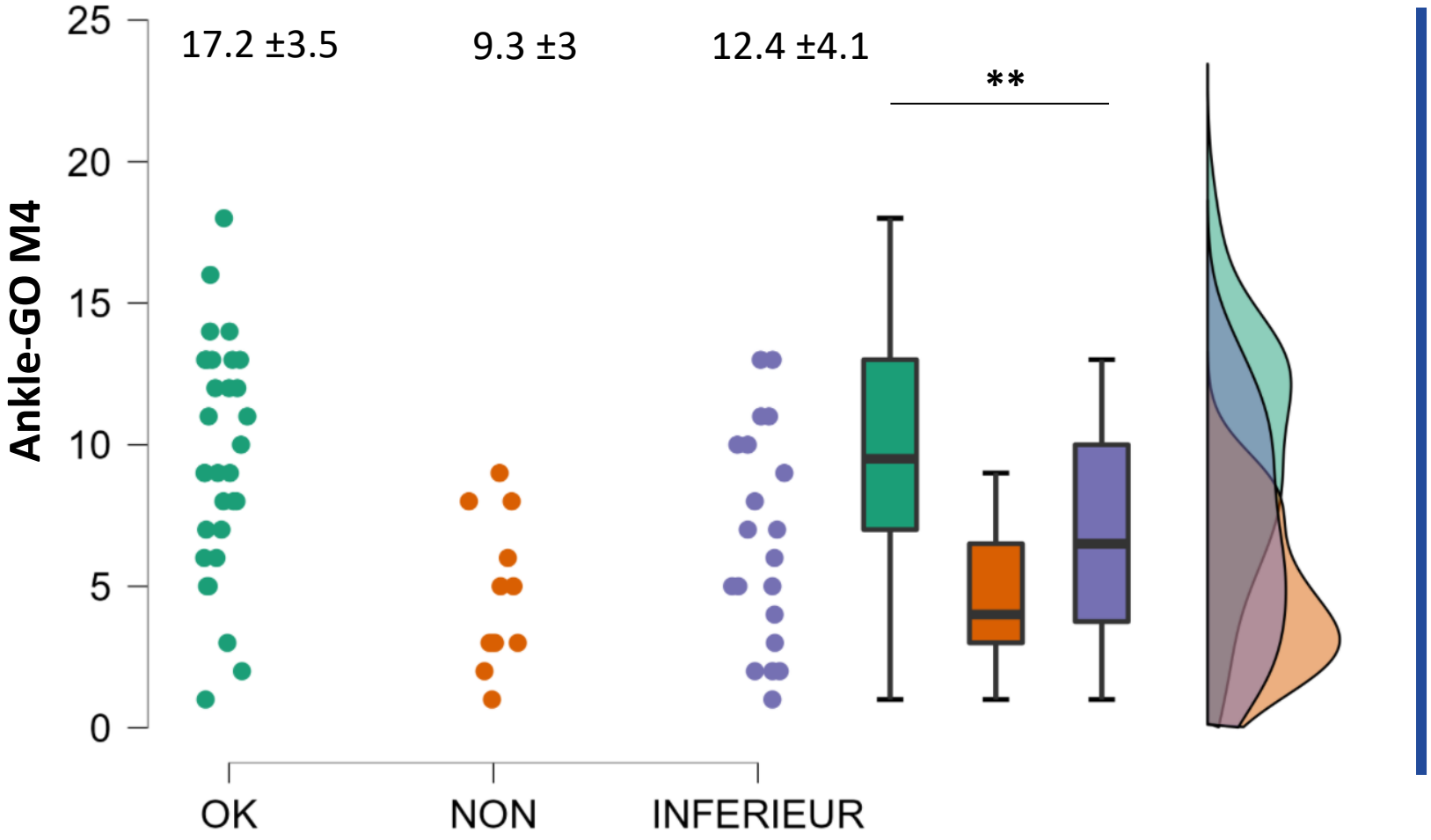


Discriminant validity

n=64		M2	M4
$FAAM_{adl}$	Raw	85.1 ± 14.4 [25 ; 100]	93.5 ± 7.5 [65.5 ; 100]
	Score	0.8 ± 0.9 [0 ; 2]	1.3 ± 0.8 [0 ; 2]
$FAAM_{sport}$	Raw	59.7 ±22.3 15.6 ;96.9]	80.1 ±17.7 [31.3; 103.1]
	Score	0.2 ± 0.5 [0 ; 2]	0.8 ± 0.8 [0 ; 2]
ALR RSI	Raw	45 ± 21.2 [6.7 ;83.3]	68.3 ±21.5 [15 ; 99.2]
	Score	0.6 ± 1 [0 ; 3]	1.8 ± 1.3 [0 ; 3]
SLS	Raw	3.5 ± 2.9 [0 ; 10]	1.8 ± 1.8 [0 ; 7]
	Score	1.6 ± 0.8 [0 ; 3]	2.1 ± 0.8 [0 ; 3]
mSEBT (COMP)	Raw	80 ±7.3 [61.2 ;93.1]	84.9 ± 7 [69.9 ; 97.9]
	Score	2.3 ± 1.2 [0 ; 5]	3.3 ± 1.5 [0 ; 7]
SHT	Raw	22 ± 11.1 [6.5 ; 52]	13.3± 5.8 [7 ; 39]
	Score	1.2± 1.4 [0 ; 5]	2.6 ± 1.7 [0 ; 5]
F8T	Raw	21 ± 9.4 [9.5 ; 45]	14 ± 4.6 [9.5 ; 35]
	Score	1.2 ± 0.9 [0 ; 3]	2.3 ± 0.8 [0 ; 3]
ANKLE GO	Score	**7.8 ± 4.2 [1 ;18]**	**14.2 ± 4.8 [5 ; 23]**

B Picot, R Lopes, G Rauline, F Fourchet et A Hardy, *in submission*

Preliminary results



Of the 64 patients in the predictive validation component:

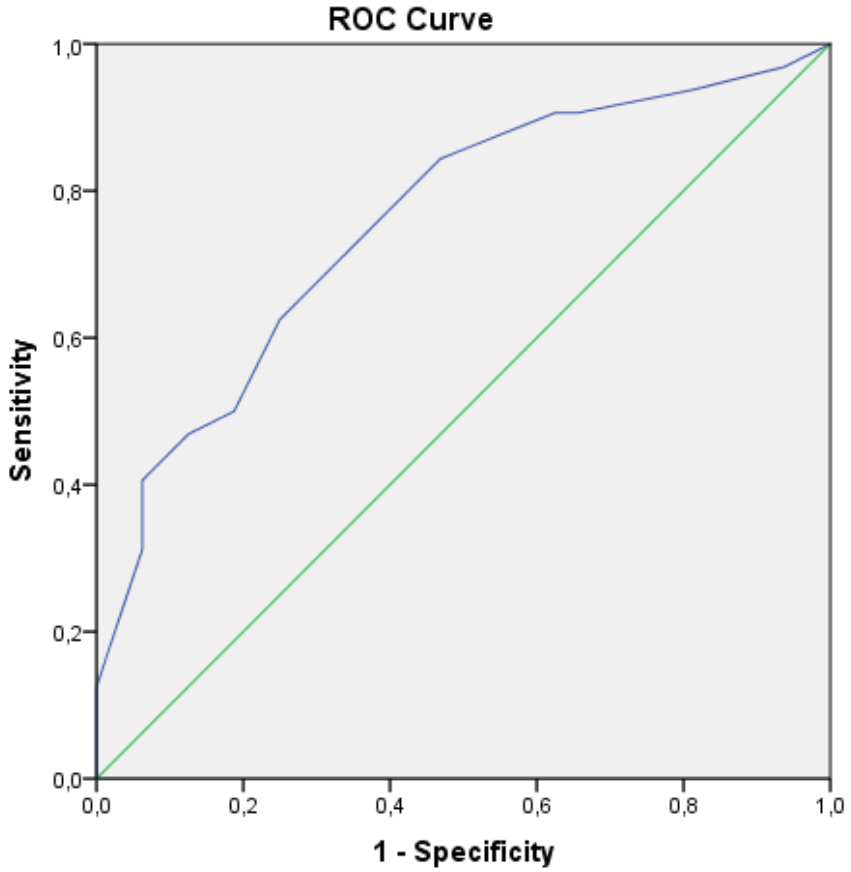
*_ 32 patients **(50%)** returned to their preinjury level of sport at 4 months.*

*_ 12 patients **(19%)** had not attempted to sport at 4 months*

Predictive Ability for Returning to Preinjury Level of Sport or Higher

B Picot, R Lopes, G Rauline, F Fourchet et A Hardy, *in submission*

Preliminary results



*Two-month, ANKLE GO score showed a good predictive ability for a return to preinjury level at 4 months (**AUC=0.77** ;95%CI : 0.64-0.88 ; p<.001).*

*A Youden index of 0.38 was observed at a score of **8 points** corresponding to a **sensitivity of 72% and specificity of 66%.***

Predictive Ability for Returning to Preinjury Level of Sport or Higher

B Picot, R Lopes, G Rauline, F Fourchet et A Hardy, *in submission*


What about
Full recovery ?

Coper OR Non-coper ?

CAI Patients		LAS COPER	
1st LAS	More than 1 year ago	1st LAS	More than 1 year ago
Feeling of instability	Episodes of giving way/ recurrences CAIT < 24	No instability	No « giving-way » or recurrences CAIT > 24
Loss of function	In ADL activities (FAAMadl <90%) Sport activities(FAAMsport <80%)	No loss of function	Back to pre-injury level Feeling of full recovery

Gribble et al. *@BJSM* **2014,** Wikstrom & Brown *@Sports Med*. **2013**, Hertel et Corbett *@JAT* **2019**

Full Recovery prediction

Original research

OPEN ACCESS

Ankle-GO score is associated with the probability of becoming coper after lateral ankle sprain: a 1-year prospective cohort study

Brice Picot ,[1,2] François Fourchet,[2,3] Gauthier Rauline,[4] Kinan Freiha,[4] Erik Wikstrom ,[5] Ronny Lopes ,[6] Alexandre Hardy [4]

Ankle-GO > 11 pts

Ankle-Go

X 12

COPER

Males

X 5

Picot et al. *@BJSM* **2024**

Benefits of having a cluster of tests

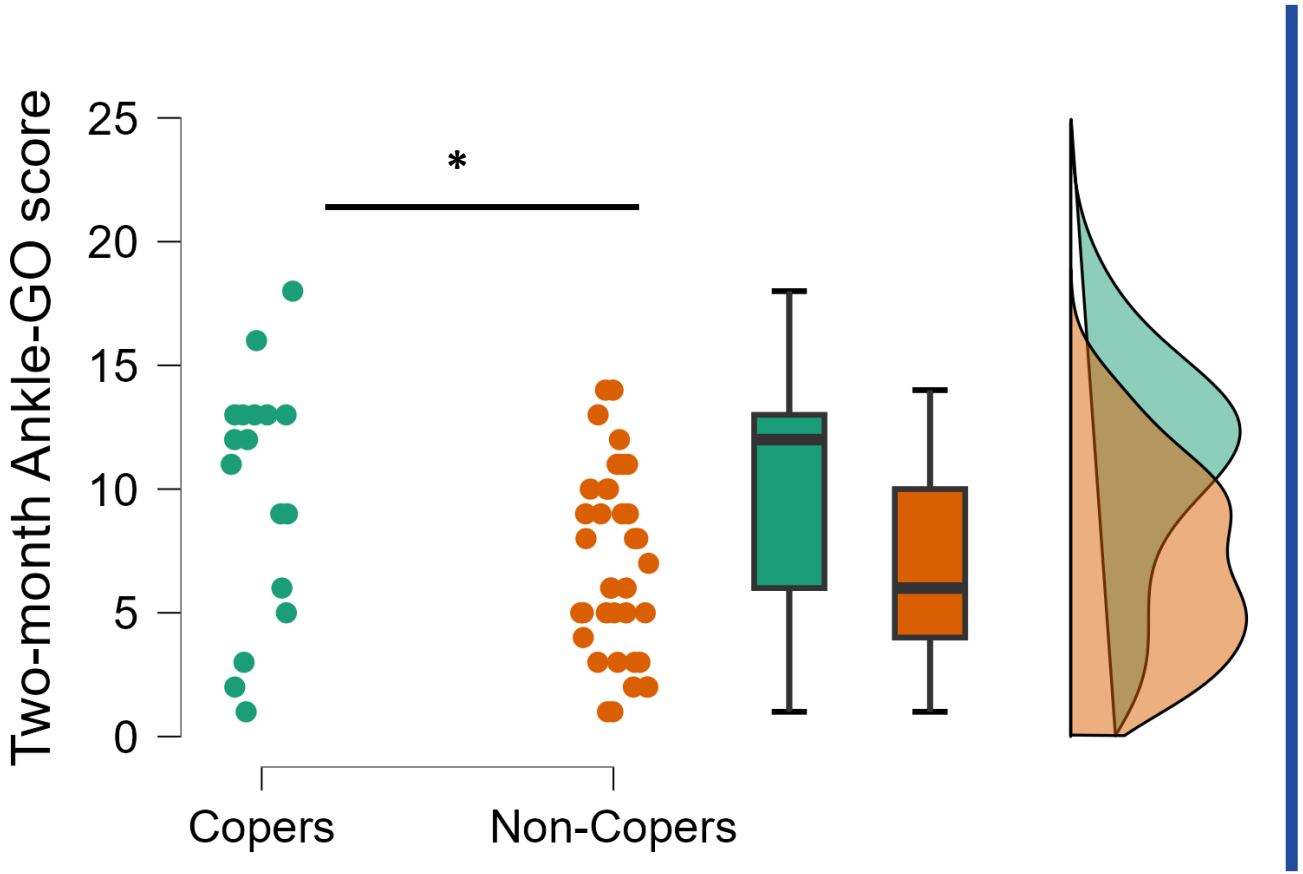
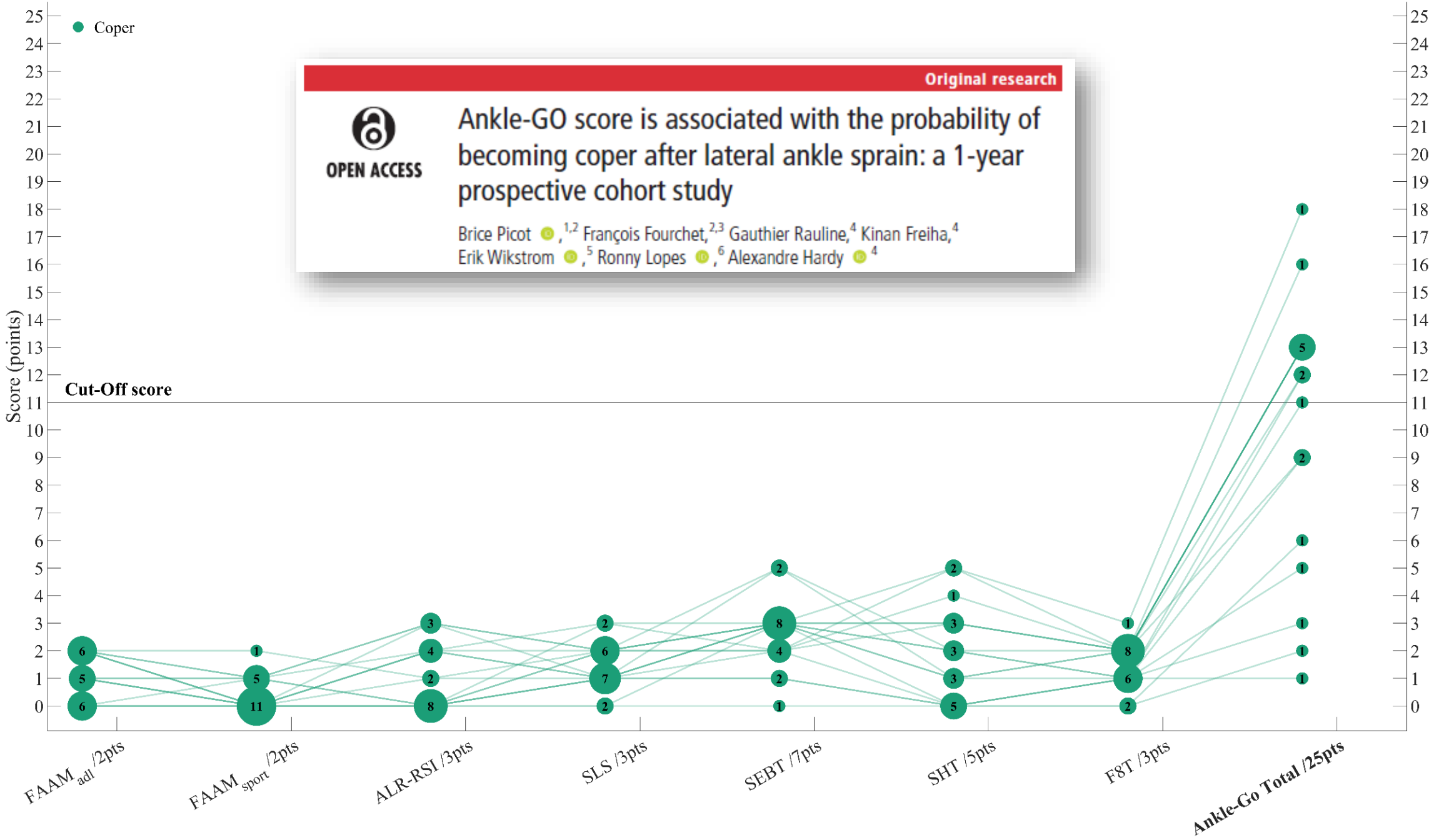


Table 3 Distribution of the raw values (mean±SD or median±IQR for non-parametric tests) of the 2-month Ankle-GO score according to the recovery status (copers vs non-copers) 1 year after lateral ankle sprain

	Copers (n=17)	Non-copers (n=37)	P value
$FAAM_{adl}$ (%)*	92.9±8.3	84.5±14.3	0.058
$FAAM_{sport}$ (%)*	71.9±34.4	59.4±34.4	0.097
ALR-RSI (%)*	55.8±46.7	46.7±29.2	0.083
SLS (errors)*	2±4	4±3	0.232
SEBT COMP (%)	82.3±6.2	78.4±7.8	0.079
SEBT ANT (%)	63±5.2	59.2±7.2	0.054
SEBT PM (%)	95.2±7.1	90.7±9.1	0.079
SEBT PL (%)	90.3±9.9	85.3±11	0.118
SHT (s)	17.5±11.2	23.7±11.2	0.065
F8T (s)*	14.5±5	19±16	0.057

*Non-parametric test (data are expressed in median and IQR with Mann-Whitney U tests).
ALR-RSI, Ankle Ligament Reconstruction Return to Sport after Injury; ANT, Anterior; COMP, Composite score; $FAAM_{adl\text{-}sport}$, Foot and Ankle Ability Measures-Activities of daily living & sport subscales; F8T, Figure of Eight Test; PL, posterolateral; PM, posteromedial; SEBT, Star Excursion Balance Test; SHT, Side Hop Test; SLS, Single Leg Stance.

Picot et al. *@BJSM* **2024**

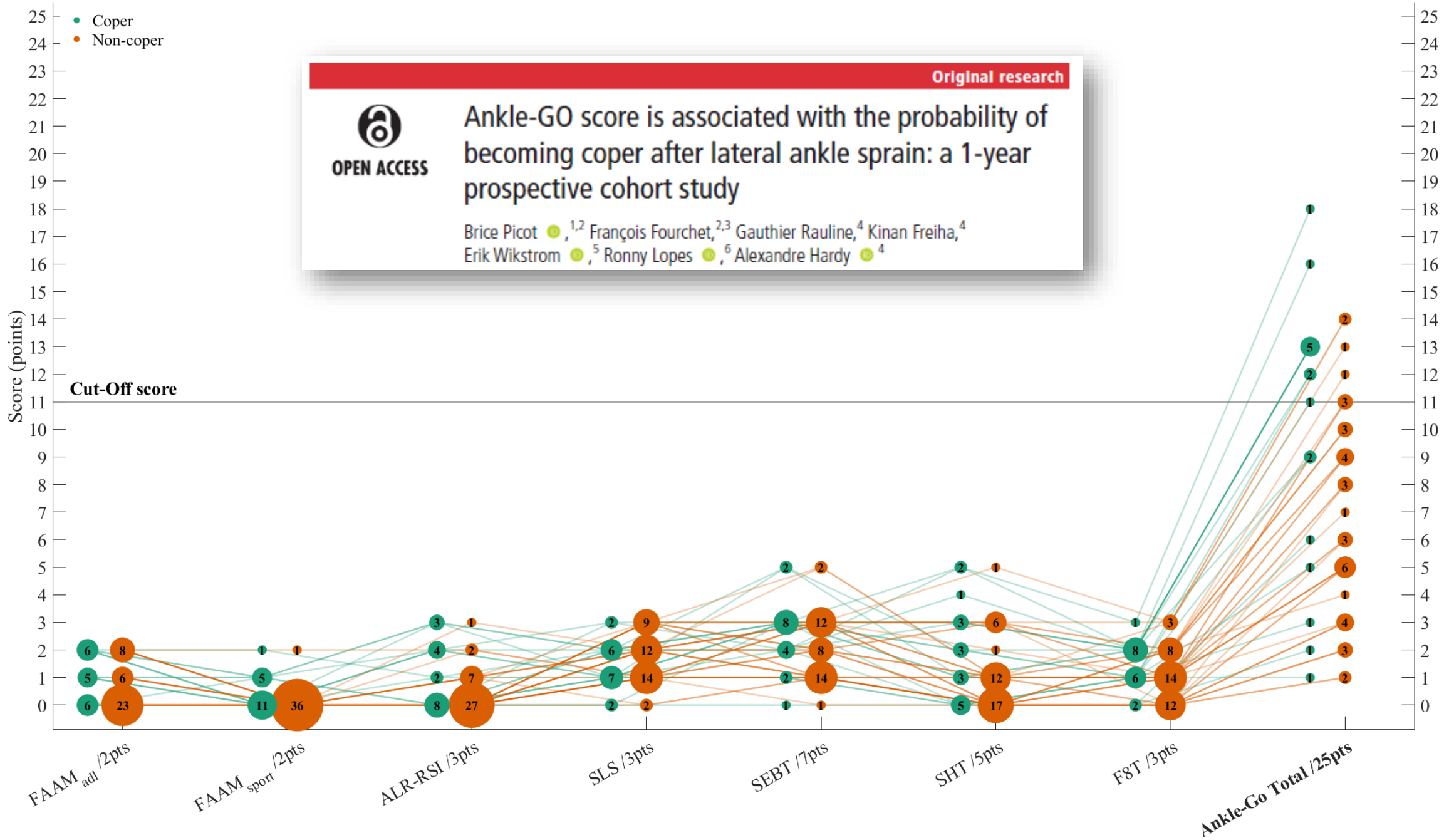


Original research

OPEN ACCESS

Ankle-GO score is associated with the probability of becoming coper after lateral ankle sprain: a 1-year prospective cohort study

Brice Picot ,[1,2] François Fourchet,[2,3] Gauthier Rauline,[4] Kinan Freiha,[4] Erik Wikstrom ,[5] Ronny Lopes ,[6] Alexandre Hardy [4]



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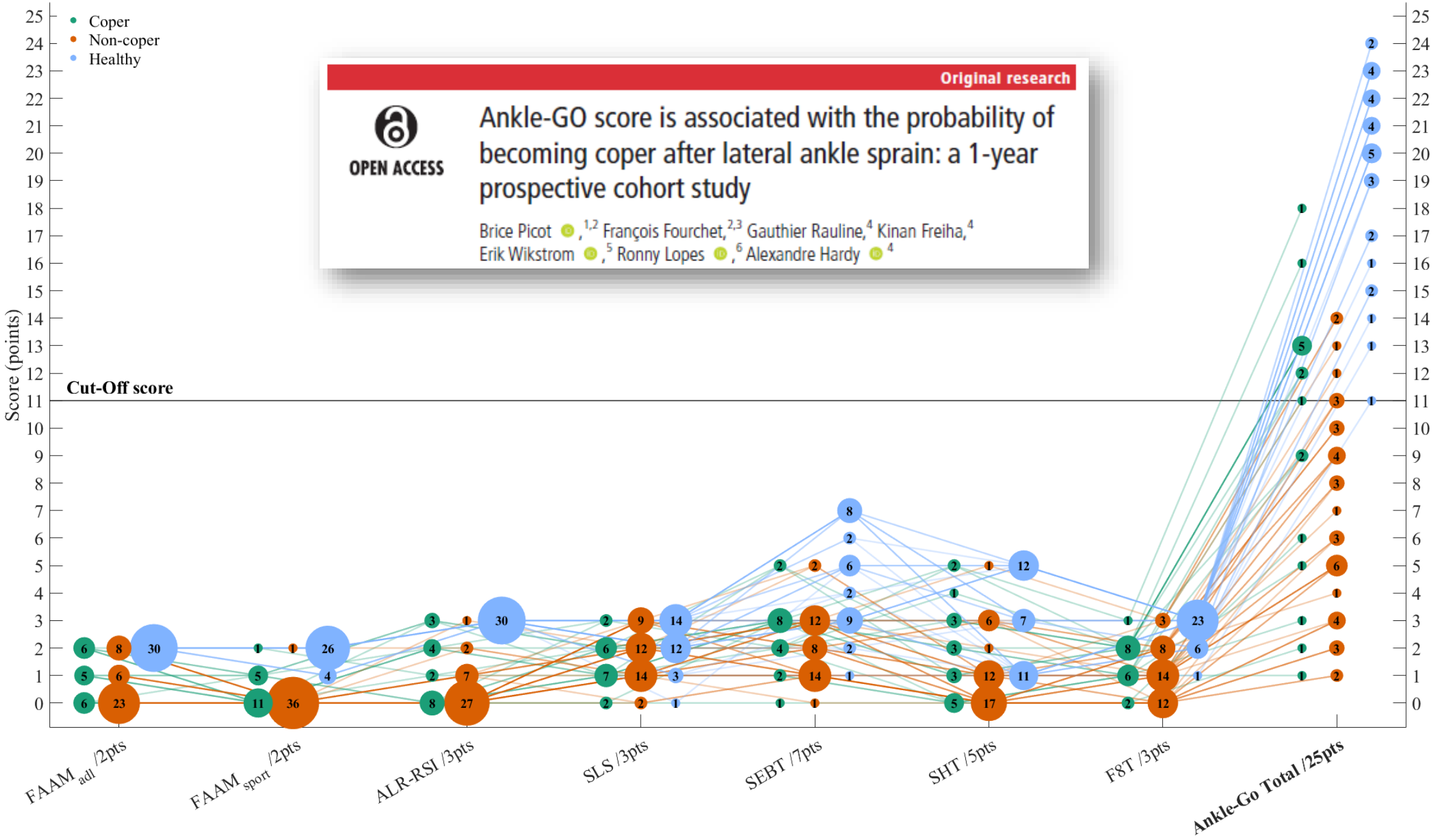

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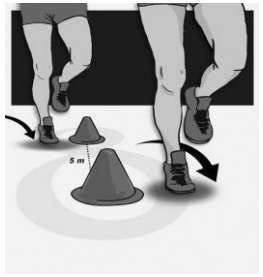
Ankle-GO™ score



FAAM
4 pts

ALR-RSI
3 pts

SLS
3 pts

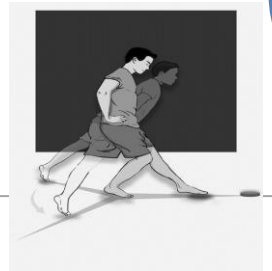
SEBT
7 pts

SHT
5 pts

F8T
3 pts

Ankle-GO™

25 points



Score helping for decision making

Use the ENTIRE score

Picot et al., *@Sports Health* **2024a,** *@Sports Med Open* **2024b**, *@BJSM* **2024c**

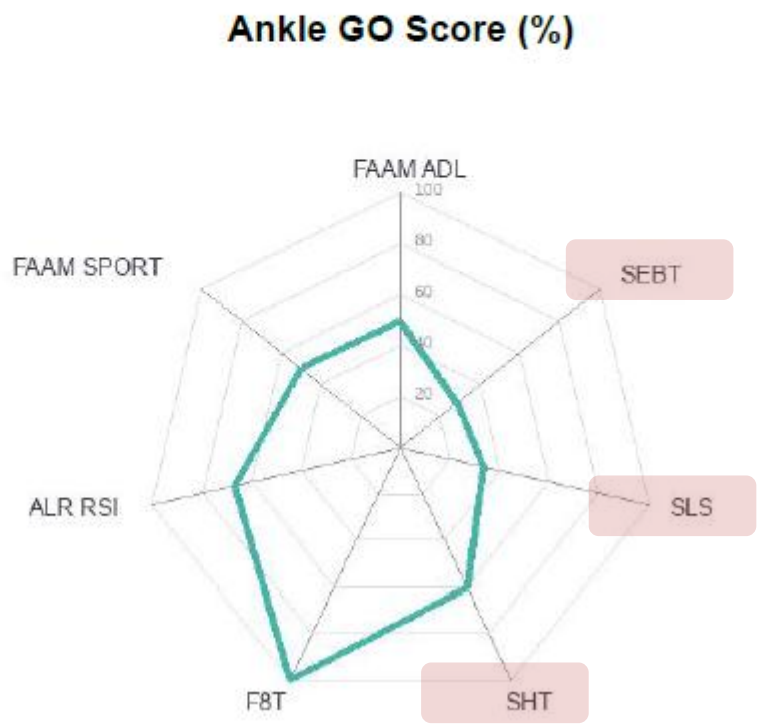
Interpreting the score in practice

Score AnkleGo : 13 / 25

Date blessure : 10/07/2024
Type de sport : Saut, pivot, contact (football, handball, rugby, basketball, sport de combat…)
Circonstance : Sport
Niveau sportif : Loisir/Amateur
Poids : 90 kg
Taille : 1.87 m
Âge : 37 ans

Ankle-Go

SCAN ME



GUIDING THE END OF REHABILITATION

www.anklego.com

Interpreting the score in practice

Auto-évaluation du 16/10/2024 (cheville lésée)

FAAM ADL / Score : 1 / 2

Se tenir debout	4 - Pas de difficulté
Marcher sur un terrain régulier	4 - Pas de difficulté
Marcher pied nu sur un terrain régulier	4 - Pas de difficulté
Monter une pente	3 - Difficulté légère
Descendre une pente	4 - Pas de difficulté
Monter les escaliers	3 - Difficulté légère
Descendre les escaliers	4 - Pas de difficulté
Marcher sur un terrain irrégulier	3 - Difficulté légère
Monter et descendre d'un trottoir	4 - Pas de difficulté
S'accroupir	4 - Pas de difficulté
Se mettre sur la pointe des pieds	3 - Difficulté légère
Faire les premiers pas (le matin au réveil /après une position assise prolongée)	2 - Difficulté modérée
Marcher 5 minutes ou moins	4 - Pas de difficulté
Marcher environ 10 minutes	4 - Pas de difficulté
Marcher 15 minutes ou plus	4 - Pas de difficulté
Les tâches ménagères	4 - Pas de difficulté
Les activités de la vie quotidienne	4 - Pas de difficulté
Les soins personnels	4 - Pas de difficulté
Un travail léger à modéré (se tenir debout, marcher…)	4 - Pas de difficulté
Un travail lourd (pousser/ tirer, grimper…)	3 - Difficulté légère
Les activités de loisirs	4 - Pas de difficulté

Total : 77/84 soit 92%

FAAM SPORT / Score : 1 / 2

Courir	3 - Difficulté légère
Sauter	3 - Difficulté légère
Se réceptionner d'un saut	4 - Pas de difficulté
Démarrer et s'arrêter rapidement	4 - Pas de difficulté
Faire des pas chassés / des déplacements latéraux	4 - Pas de difficulté
Activités sportives à faible impact (peu de chocs)	4 - Pas de difficulté
Capacité à exécuter votre activité sportive avec votre technique habituelle	3 - Difficulté légère
Capacité à exécuter votre sport aussi longtemps que vous le souhaitez	4 - Pas de difficulté

Total : 77/84 soit 92%

- Dorsal flexion ?
- Sural triceps ?
- Sense of position?

=> Running on uneven ground

Interpreting the score in practice

Tests fonctionnels du 15/10/2024 (cheville lésée)

Figure Of 8 / Score : 3 / 3

Quel est le meilleur temps réalisé lors du test ?	11.1 s
Sensation d'instabilité sur la cheville lors du test ?	Non

Side Hop Test / Score : 3 / 5

Quel est le meilleur temps réalisé lors du test ?	10.8 s
Sensation d'instabilité sur la cheville lors du test ?	Non

Single Leg Stance / Score : 1 / 3

Combien d'erreurs ont été commises ?	Plus de 3 erreurs
Sensation d'instabilité sur la cheville lors du test ?	Non

Star Excursion Balance Test / Score : 2 / 7

Longueur de la jambe d'appui (EIAS-malléole médiale):	100 cm
Distance atteinte dans la direction antérieure :	58 cm | 57 cm | 60 cm | Moy. 58.33 cm
Distance atteinte dans la direction postéro médiale :	104 cm 104 cm 104 cm | Moy. 104 cm
Distance atteinte dans la direction postéro latérale :	87 cm | 88 cm | 89 cm | Moy. 88 cm
Sensation d'instabilité sur la cheville lors du test ?	Non

Static balance exercises

Dorsal flexion?
Evertors strength?

External Supports and Ankle-GO™

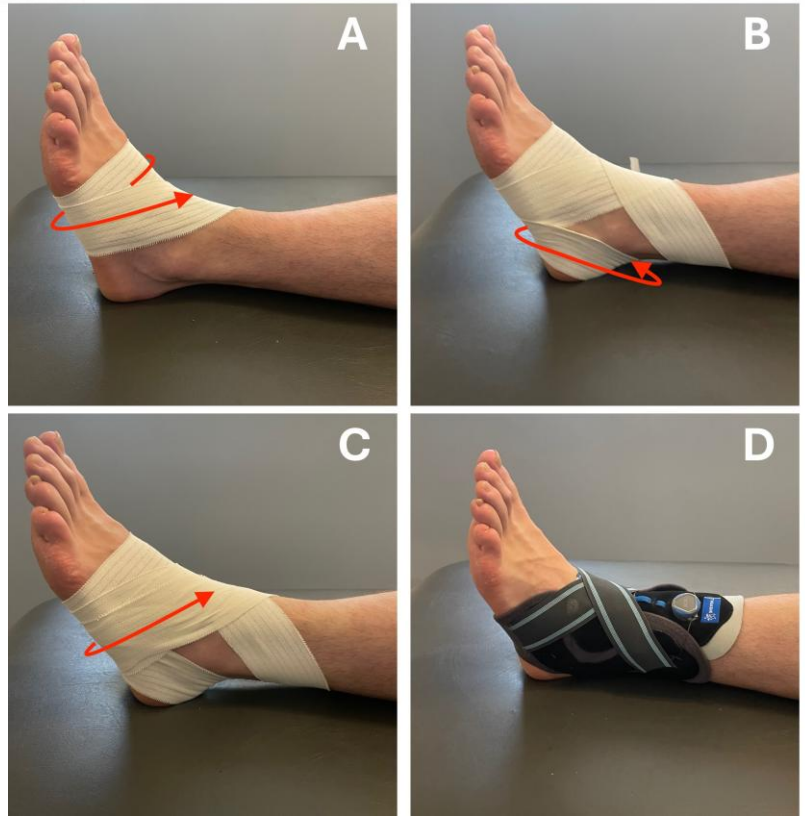
TABLE 3. Comparison Of The Total Score And Each Component Of The Ankle-GO (Mean ± SD) Between The Control And Ankle Support Conditions.

	No ankle Support	Taping	Bracing	P value	Effect size
Ankle-GO (/25 pts)	8 ± 4.5 [a]	11.2 ± 4.2	12.8 ± 5.3	**<0.001**	0.160
Ankle-GO apprehension (/4 pts)	2.7 ± 1.3 [a]	3.5 ± 0.9	3.6 ± 1.3	**0.007**	0.108
$FAAM_{adl}$ (%)	82.1 ± 14.3 [a]	89.8 ± 10.9	91.0 ± 9.0	**0.007**	0.108
$FAAM_{sport}$ (%)	55.5 ± 22.2 [a]	71.7 ± 20.0	75.0 ± 19.9	**0.001**	0.148
ALR-RSI (%)	34.2 ± 24.0 [a]	53.4 ± 25.2	60.7 ± 27.1	**<0.001**	0.166
SLS (errors)	3.1 ± 2.6	2.9 ± 2.3	2.4 ± 2.0	0.471	0.017
SEBT Comp (%)	84.4 ± 7.3	86.6 ± 6.5	87.9 ± 7.2	0.152	0.042
SEBT Ant (%)	62.8 ± 6.9	65 ± 6.9	63.9 ± 6.9	0.48	0.017
SEBT PM (%)	95.9 ± 9.8	99.9 ± 10.1	98.2 ± 9.2	0.28	0.283
SEBT PL (%)	94.3 ± 10.6	99 ± 9.1	97.5 ±8.8	0.152	0.042
SHT (s)	24.4 ± 16.0	18.8 ± 12.7	17.6 ± 11.5	0.12	0.048
F8T (s)	19.9 ± 10.7	17.8 ± 9.1	17.9 ± 9.2	0.65	0.010

J Athl Train. 2025 Feb 7. doi: 10.4085/1062-6050-0584.24. Online ahead of print.

Ankle supports enhance only psychological aspects of the Ankle-GO score in patients with chronic ankle instability

Brice Picot [1 2], François Fourchet [2 3], William Laydevant [4], Camille Louis [5], Gauthier Rauline [5], Alain Meyer [5], Leslie Podlog [6 7], Ronny Lopes [8], Alexandre Hardy [5]



Picot et al., *@JAT* **2025**

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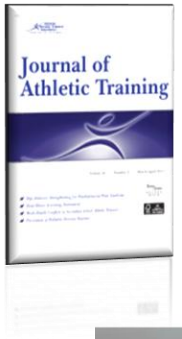

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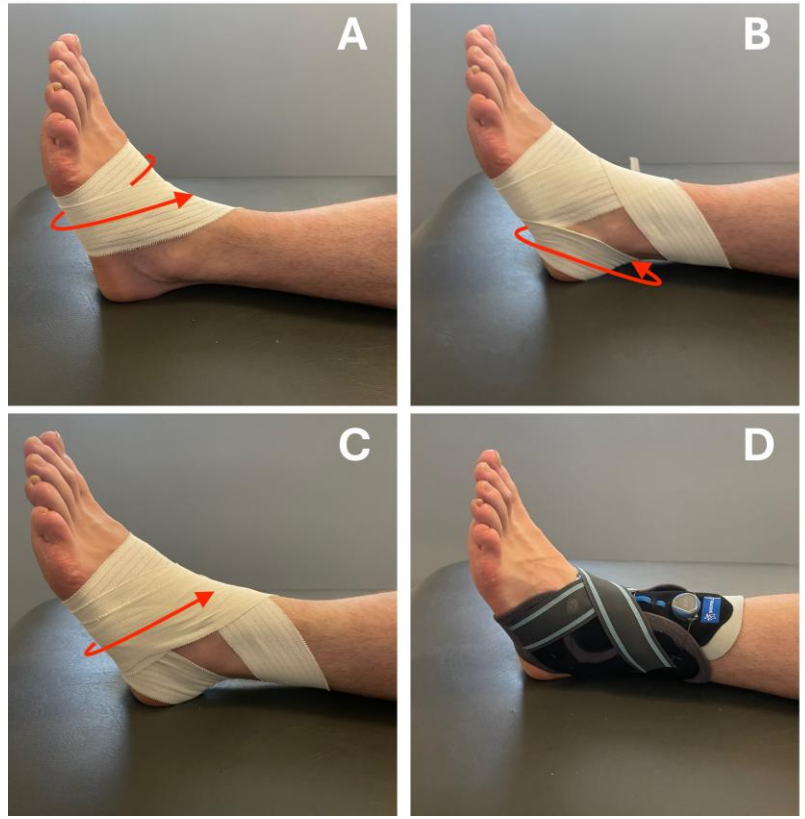
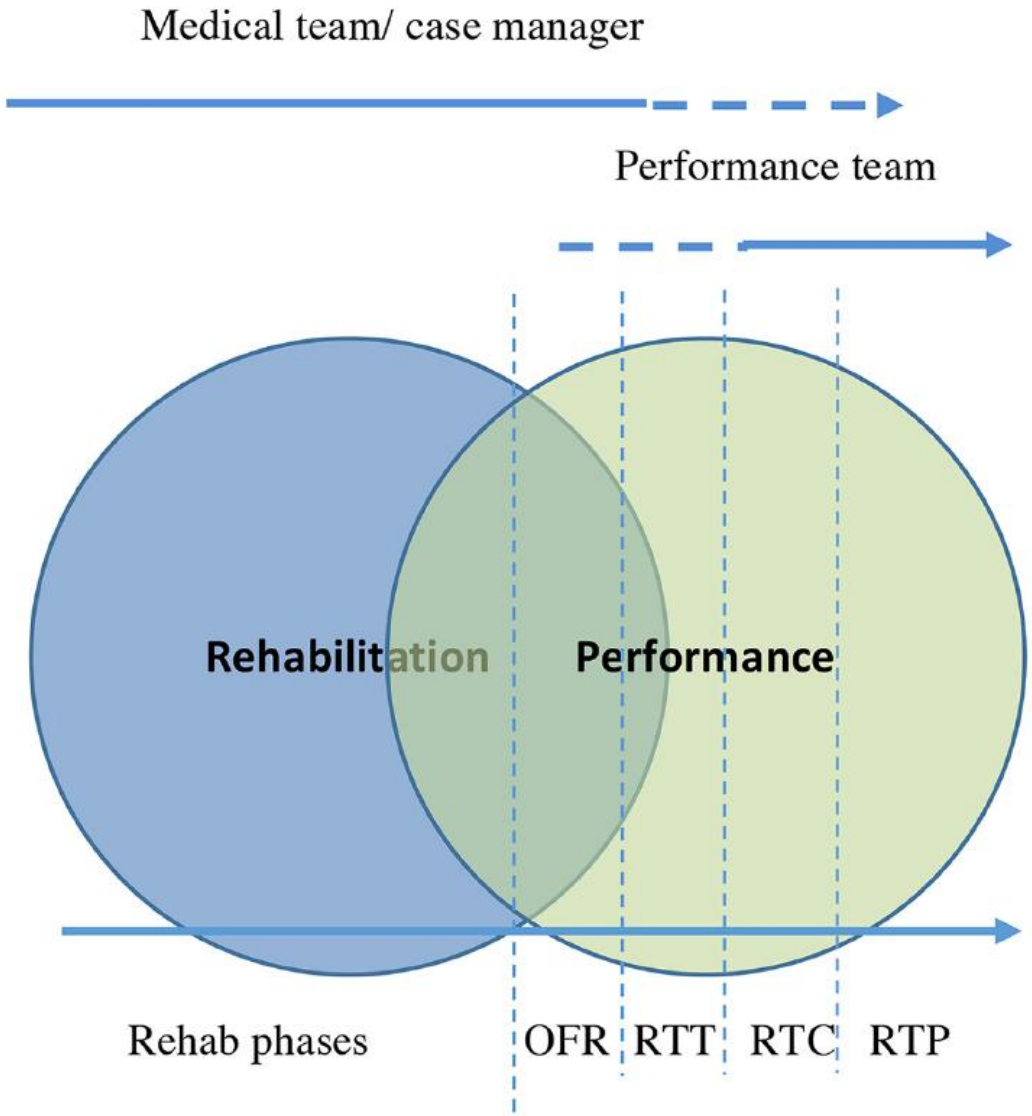


Picot et al., *@JAT* **2025**

From RTS to RTPerf…



Modified Illinois

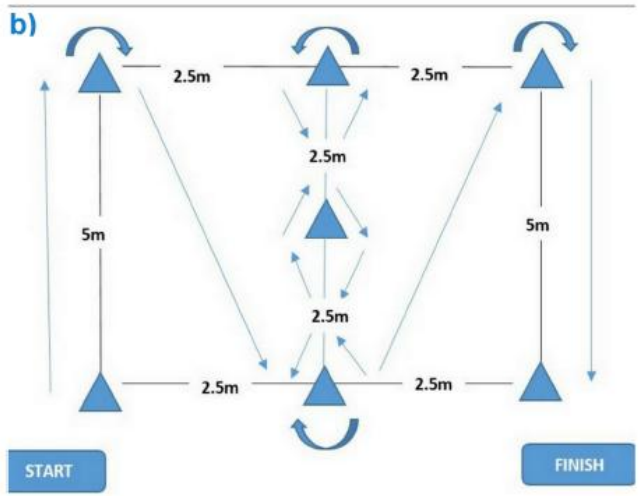


Table 2 Between-group comparison of Demographic characteristics, functional performance and ankle tests for CAI and healthy participants.

Outcome	CAI group (n = 53)	Non-CAI group (n = 53)	p value	Cohen's D (95% CI)
FPT				
30 m sprint (s)	5.67 ± 0.58	4.97 ± 0.63	<0.001*	1.16 [0.72–1.60]
MICODT (s)	14.52 ± 0.78	12.57 ± 0.87	<0.001*	2.38 [1.78–2.987]
COD (s)	5.81 ± 0.45	5.14 ± 0.51	<0.001*	1.39 [0.92–1.85]

Buckthorpe et al., **2018,** Jamsandekar et al. *@Peere J* 2022

CONCLUSION

No time-based rehabilitation and RTS!

- Assess the deficits (ROAST & Ankle-GO™)
➔ For guiding the RTS

<u>Risk management</u>

- RTP management
- Ankle support / Tape

<u>Control to chaos:</u>

Sports-based rehabilitation
CoD?
Deceleration ?
Recreation
Double task, VR ?

	TESTS		RAW VALUES	POINTS	MAXIMUM SCORE
FUNCTIONAL PERFORMANCE TESTING	Single leg stance test		> 3 errors	0	3
			1 - 3 errors	1	
			0 error	2	
			No apprehension	+1	
	Star excursion balance test (SEBT)		< 90%	0	7
			90 - 95%	2	
			> 95%	4	
			Anterior (ANT) > 60 %	+1	
			Posteromedial (PM) > 90 %	+1	
			No apprehension	+1	
	Side hop test		> 13 s	0	5
			10 - 13 s	2	
			< 10 s	4	
			No apprehension	+1	
	Figure-of-8 hop test		> 18 s	0	3
			13 - 18 s	1	
			< 13 s	2	
			No apprehension	+1	
PATIENT REPORTED OUTCOME MEASURE	Foot and Ankle Ability Measure (FAAM)	Activities of Daily Living	< 90 %	0	2
			90 – 95 %	1	
			> 95 %	2	
		Sport	< 80 %	0	2
			80 – 95 %	1	
			> 95 %	2	
	Ankle ligament reconstruction-return to sport after injury (ALR-RSI)		< 55 %	0	3
			55-63 %	1	
			63 – 76 %	2	
			> 76 %	3	
Ankle-GO					**25**