ARCHERY PERFORMANCE PANEL · OVERVIEW AND USER GUIDE

Turkish National Archery Team

An archery-specific load monitoring, training planning, score tracking and reporting system built for the national team coach. Arrow count, draw weight and holding time combine into a single load metric; sRPE, monotony and ACWR generate per-athlete risk flags.

LOGIN DETAILS

Address	**https://app.loadviserpro.com/login**
E-mail	**Provided to the national team coach**
Password	**Sent separately**
Teams	Recurve National Team · Compound National Team (switch at top left)
Squad	2026 national squad, 16 athletes (recurve 4 M + 4 W, compound 4 M + 4 W)

We recommend changing your password via the name menu at top right on first login. Existing shooting entries in the panel are sample data for demonstration; once you start entering your own, we can clear the sample data with a single command.

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What does the system do?

1 · Shooting Log

For each session, enter per athlete: arrow count, RPE (1–10), mental effort, draw weight, holding time, draw shoulder pain and optional score. Whole team in one form.

2 · Archery Load Index (ALI)

ALI = arrows × holding weight (kg) × holding time factor. Recurve uses draw weight; compound uses holding weight after let-off. Unit: kg·arrows.

3 · Internal load (sRPE)

RPE × minutes (Foster). In archery, mental fatigue raises RPE without changing heart rate, so mental effort is asked separately.

4 · ACWR and monotony

The 7:28-day EWMA ratio is calculated for ALI, arrow count and sRPE. 7-day monotony and strain (Foster) are tracked per athlete.

5 · Risk flags

ALI ACWR > 1.3 · arrows +30%/wk · draw +1 lb/14 d · shoulder pain ≥5/10 ×2 days · prior serious injury · monotony > 2.0. Flagged athletes are highlighted.

6 · Score tracking

70 m / 50 m 72 arrows, indoor 18 m 60 arrows, 36 arrows and free formats; arrow average, 10 and X count; training and competition scores tagged separately.

7 · Training plan and calendar

Planned sessions (target arrows, distance, duration) go on the calendar and can repeat weekly. On the day, "Enter actual" logs arrows and RPE to the same entry.

8 · Reports (PDF)

Team report (7 / 14 / 28 / 90 days) and athlete report in one click: load, ACWR, flags, scores, injuries, tests and recommendations; with flag logo.

9 · Tests, health, wellness

Archery test battery (draw strength, clicker reaction time, holding endurance, grip, shoulder mobility, scapular stability, balance, CMJ, core), injury history, anatomical risk map, daily wellness survey.

LEFT MENU

SECTION	PURPOSE
Overview	Team weekly arrow volume, load status distribution, athlete cards, athlete × week table, flags, active injuries, upcoming competition, recent scores
Shooting Log	New session entry and last 45 days list
Score Tracking	All score entries, arrow average, 10/X
Training Plan / Calendar	Five-week calendar, add planned session, plan → actual
Athletes	Squad list; add athlete, date of birth, height, weight, photo
Internal Load ACWR (sRPE) · Monotony & Strain · Injury Risk	sRPE-based load curves, acute/chronic ratios, monotony, risk list
Performance Tests · Video Test Lab	Archery test battery; phone-video analysis of posture, range of motion, balance, overhead squat, sit-and-reach, CMJ
Body Composition · Neuromuscular Readiness · Wellness	Weight and fat tracking, daily readiness, wellness survey athletes fill in by phone
Injury History · AI Rehab Assistant · Health Archive · Anatomical Risk Map	Injury log, return plan, documents, shoulder-neck-back focused map
Archery Reports	Team and athlete PDF reports

Overview



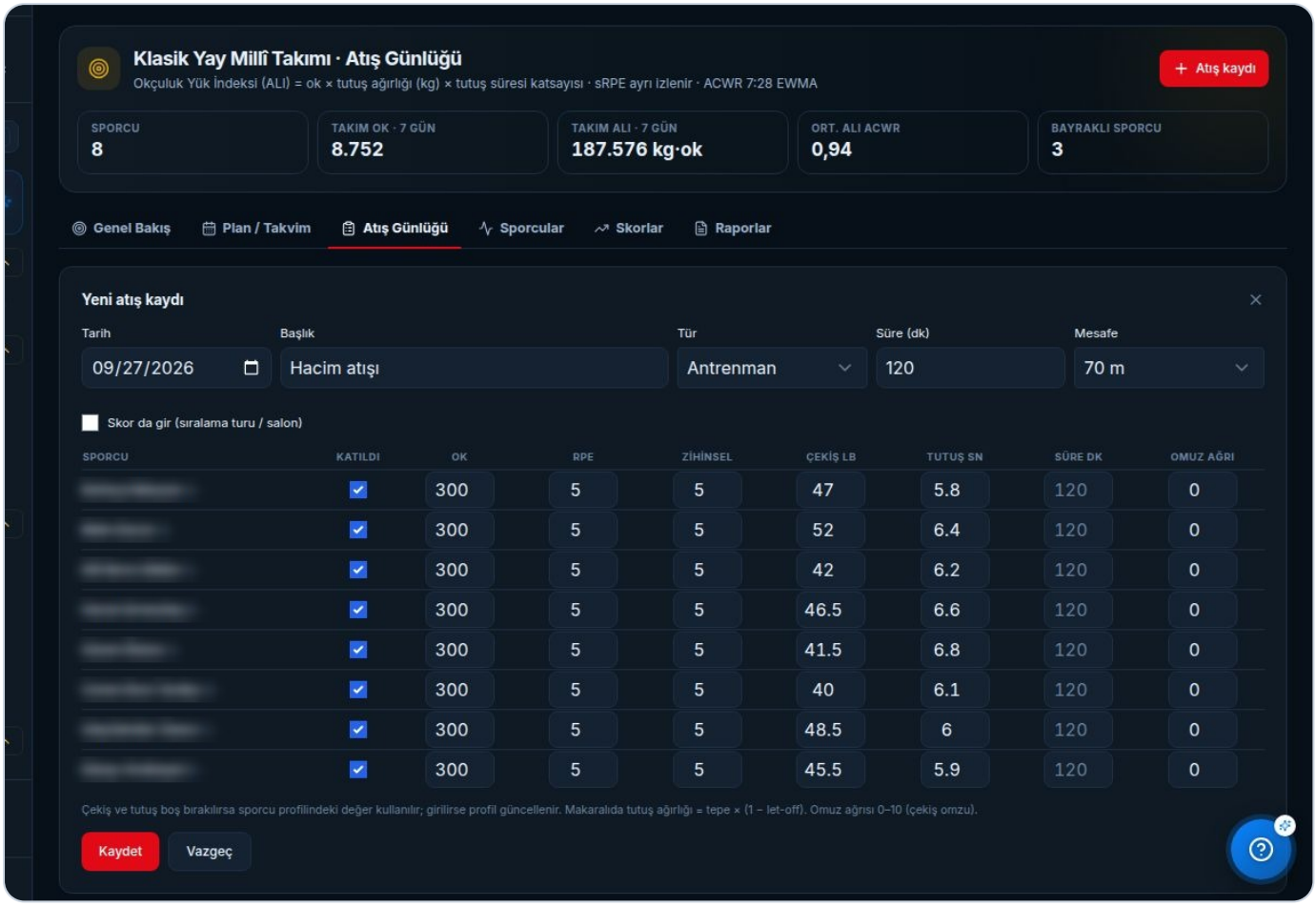
WHAT YOU SEE

- Top: athlete count, team 7-day arrows and ALI, mean ACWR, flagged athlete count.
- Weekly arrow volume chart (last 12 weeks; dashed line = weekly average).
- Load status distribution: balanced / caution / high athlete counts and days to upcoming competition.
- Card per athlete: ACWR ring (green 0.8–1.3, yellow 1.3–1.5, red above, blue low), last 8 weeks' arrow bars and % change, score average curve, ALI, monotony, shoulder status, first flag.

HOW TO READ IT

- **If the ring is above 1.3,** the athlete's last-week load exceeded the chronic average: cut arrow volume 20–30%, technique/form shooting only.
- **Yellow card**: one flag (e.g. weekly arrows +40%); **red card**: two or more flags or shoulder pain.
- The "Athletes needing attention" box on the right lists all flags in plain text; "Active injury" comes from injury records.
- In the athlete × week table, cell colour darkens relative to that athlete's own highest week.

Shooting Log — session entry



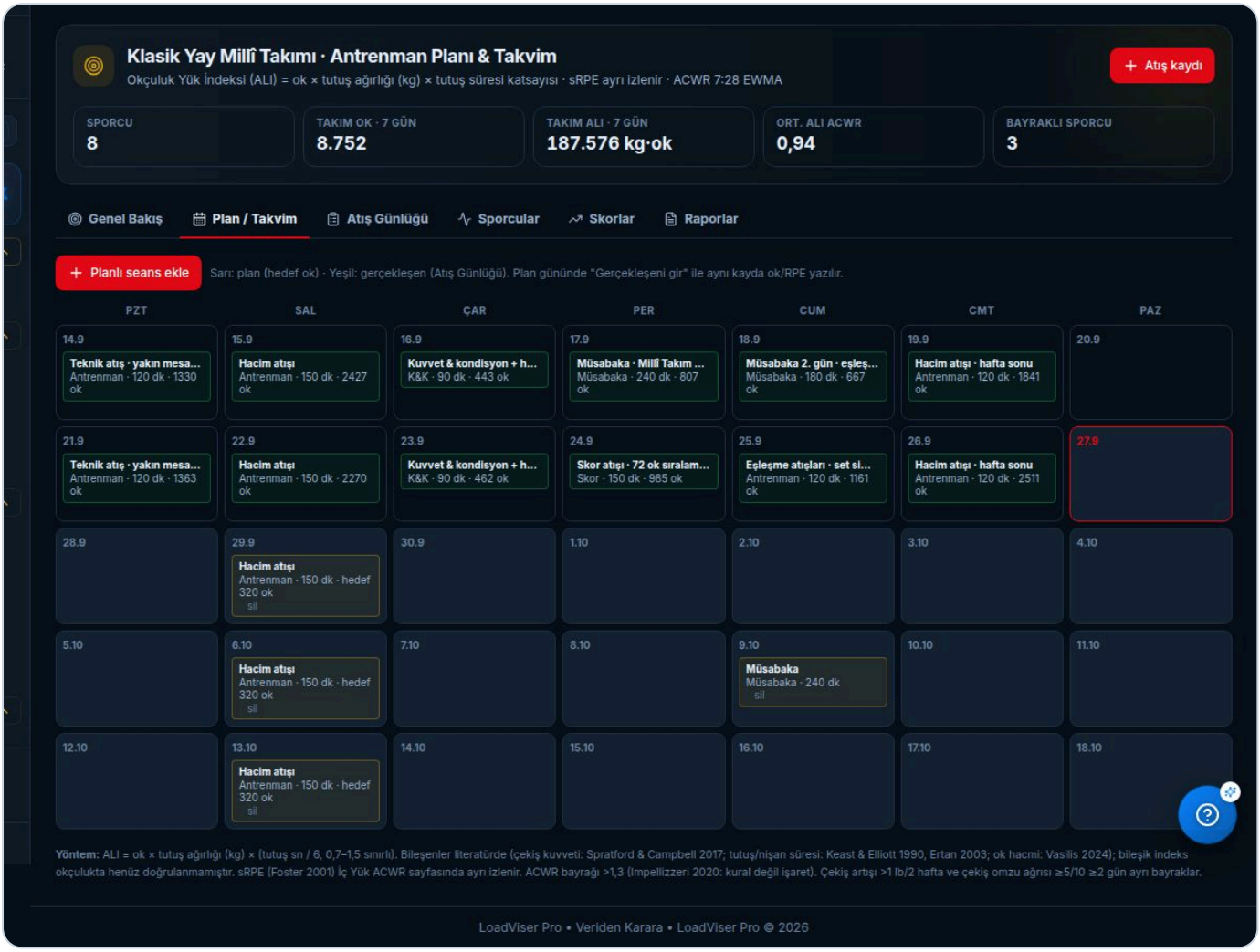
STEPS

1. Press **Shooting entry** at top right (or "New shooting entry" in the Shooting Log tab).
2. Date, title, type (training / competition / test score / recovery), duration and distance. For competitions, enter the event name.
3. In athlete rows: **Arrows**, **RPE** (1–10), **Mental** effort, **Draw lb**, **Hold s**, athlete-specific duration and **Shoulder pain** (0–10, draw shoulder). Untick athletes who did not attend.
4. To record a score, tick "Also enter score": format, arrow count, score, 10s and Xs.
5. **Save**. Load, ACWR and flags update instantly.

TIPS

- If draw and holding are left blank, the athlete profile value is used; if entered, the profile is updated.
- On compound, holding weight = peak weight × (1 – let-off). Let-off % is set in the athlete profile.
- Holding time = typical aim-and-hold time (ideal 5–7 s); time it with a stopwatch or the clicker.
- Delete a wrong entry with the trash icon in the list; load calculations are reverted automatically.
- Edit profile: pencil icon in the Athletes tab → bow class, draw weight, let-off, holding time, draw hand.

Training Plan and Calendar



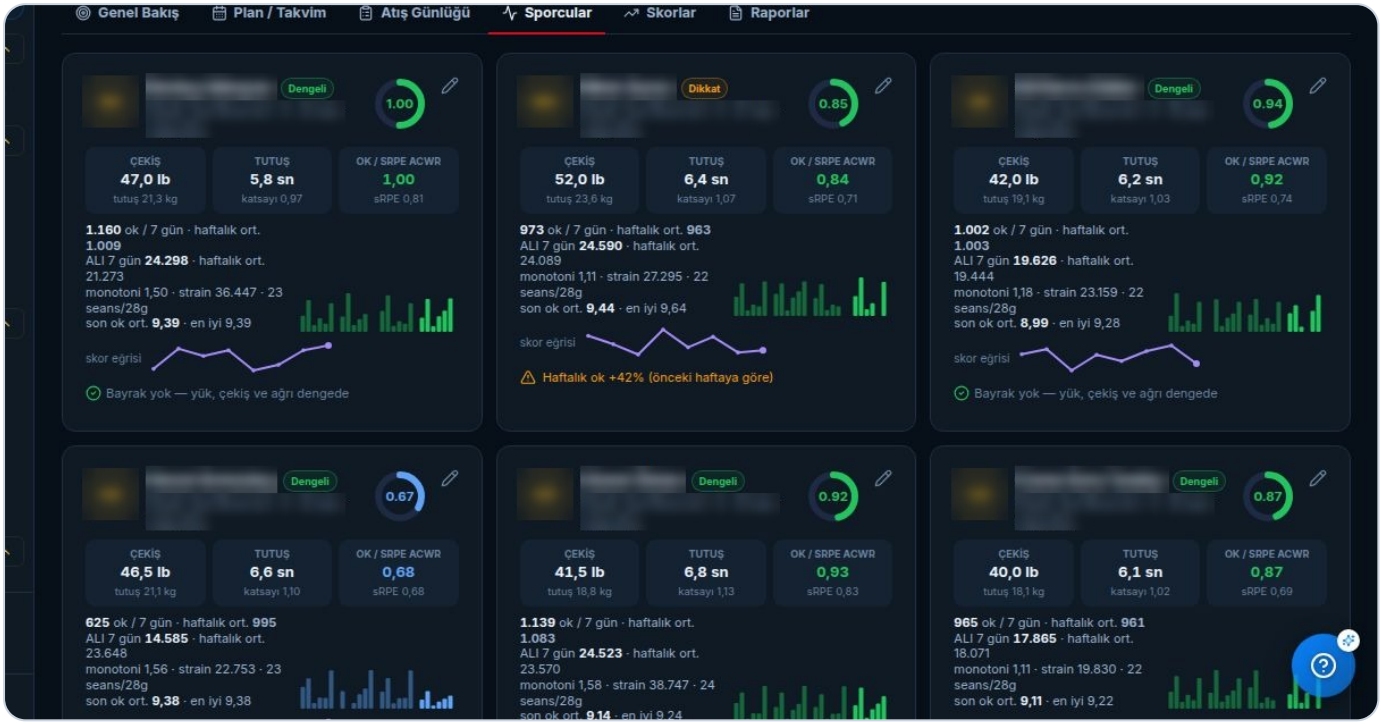
ADDING A PLAN

1. **Add planned session**: date, title, type, duration, distance, target arrows per athlete, competition name, note.
2. Enter 4 in **Weekly repeat** and the same session is copied to the same weekday for four weeks.
3. Yellow boxes are planned (target arrows), green boxes are completed sessions (arrow count and duration).

PLAN → ACTUAL

- On the planned day, the **"Enter actual"** link in the box opens the Shooting Log form prefilled with the plan details.
- On saving, the plan becomes actual, turns green and counts toward load.
- Planned competitions show on Overview as 'upcoming competition' with a countdown.
- To delete, click "delete" in the box.

Athletes and Score Tracking



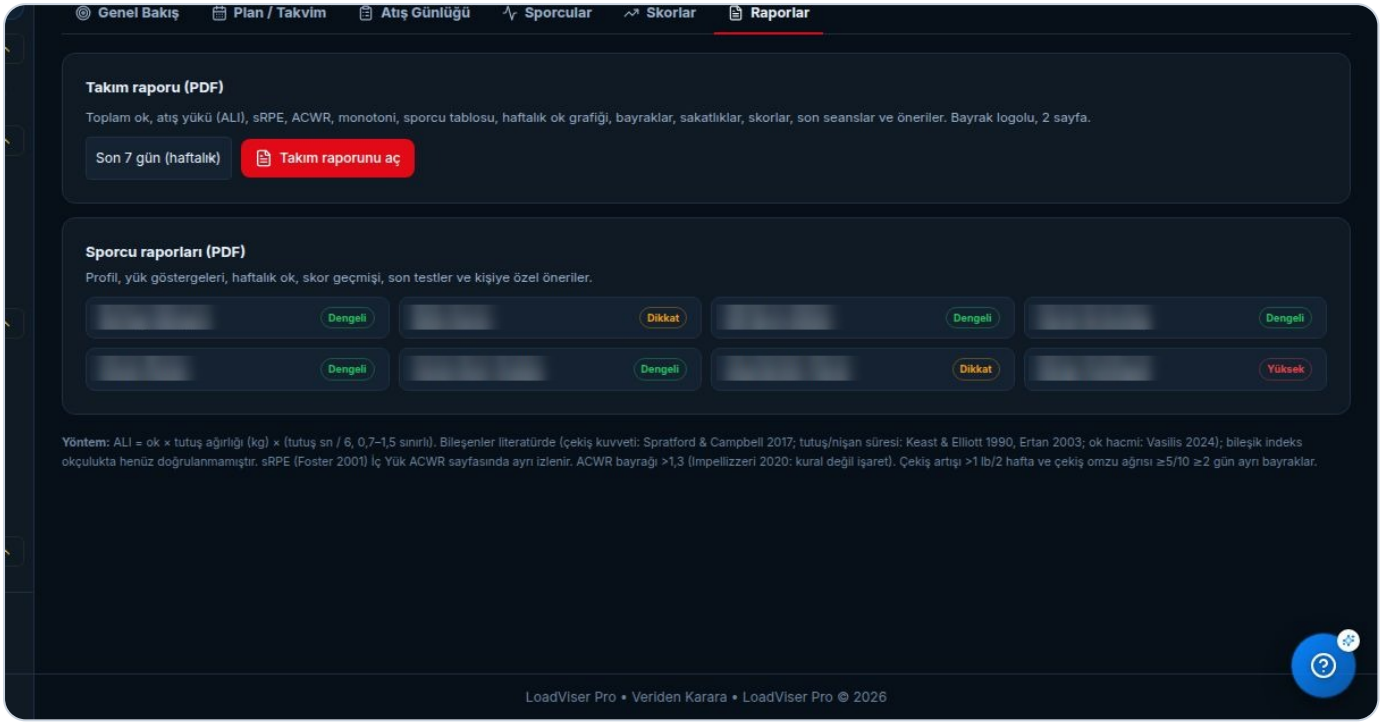
ATHLETE CARD

- Bow class, sex, age, draw hand; edit the profile with the pencil icon.
- Draw weight (lb) and holding weight (kg); holding time, load factor; arrow and sRPE ACWR.
- 7-day and weekly average arrows, ALI, monotony, strain, latest and best arrow average.
- Daily ALI bars (last 28 days, darker = last 7 days) and score curve.

SCORE TRACKING TAB

- All score records by date: format, arrows, score, arrow average (green ≥ 9.5 · purple ≥ 9.0 · yellow below), 10s and Xs, training/competition.
- Reference: 9.0 avg over 72 arrows = 648, 9.5 = 684. Recurve world records: men 702, women 694; compound women's record (704) is held by a Turkish archer.
- Scores are entered in the Shooting Log via "Also enter score"; the athlete report lists the full history.

Reports and other sections



PDF REPORTS

- **Team report**: choose a period (7 / 14 / 28 / 90 days) → "Open team report". Contents: total arrows, ALI, sRPE, ACWR, athlete table, 12-week arrow chart, flagged athletes, active injuries, upcoming competition, scores, recent sessions, recommendations.
- **Athlete report**: click the athlete's name. Profile, load metrics, score history, latest tests (draw strength, clicker, holding endurance, grip, CMJ), personalised recommendations.
- Reports open in the browser; save and share via WhatsApp or email.

OTHER SECTIONS

- **Internal Load ACWR**: sRPE-based acute/chronic curves and team average.
- **Performance Tests**: only the archery battery is listed; results feed into the athlete report.
- **Video Test Lab**: send the athlete a WhatsApp link; posture, range of motion, balance, overhead squat, sit-and-reach and CMJ are auto-analysed from a phone video; produces a PDF athlete report.
- **Wellness Survey**: athletes enter sleep, fatigue, pain and stress by phone each morning; results combine in Neuromuscular Readiness.
- **Injury History**: shoulder-, neck- and lower-back-focused records; shown on the Anatomical Risk Map.

Method, thresholds and sources

ARCHERY LOAD INDEX (ALI)

ALI = arrow count × holding weight (kg) × f(holding time) · f = hold s / 6, limited to 0.7–1.5
Recurve / barebow: holding weight = draw lb × 0.4536 · Compound: peak lb × 0.4536 × (1 – let-off)

Example: 300 arrows, 48 lb recurve (21.8 kg), 6 s hold → ALI ≈ 6,530 kg·arrows. Same athlete at 60 lb compound, 75% let-off (6.8 kg hold) → 2,040 kg·arrows.

METRIC	CALCULATION	FLAG THRESHOLD	ACTION
ALI ACWR	7-day EWMA / 28-day EWMA	> 1.3	Cut arrows 20–30%; form shooting only; weekly rise ≤10%
Weekly arrows	Last 7 days / previous 7 days	+30%	Plan gradual increase
Draw weight	Change over last 14 days	> 1 lb	Hold steady ≥ 2 weeks; shoulder girdle strength
Draw shoulder pain	Last 3 entries	≥ 5/10, two days	No score/volume shooting; physio screening
Monotony	7-day mean / SD	> 2.0	Vary volume and intensity between days
Previous serious injury	Athlete profile	—	Monthly scapular stability and shoulder ER/IR test

EVIDENCE LEVEL

The relationship of arrow volume, draw force and holding time with performance and injury is described in the literature (Spratford & Campbell 2017; Keast & Elliott 1990; Ertan 2003; Vasilis 2024; Grover & Sinha 2017). sRPE (Foster 2001) and monotony/strain (Foster 1998) are validated in general sport; the ACWR band is debated (Impellizzeri 2020) and is used in the panel as a signal, not a rule. The composite ALI index is not yet validated in archery; it will be calibrated against pain, sRPE and score as national team data accumulate.

SUPPORT

For questions, adding new athletes, clearing sample data and feature requests, contact the SPV GEN AI (Sportoteam) team. The panel also works on phone and tablet; the Shooting Log can be filled in by phone in the field.