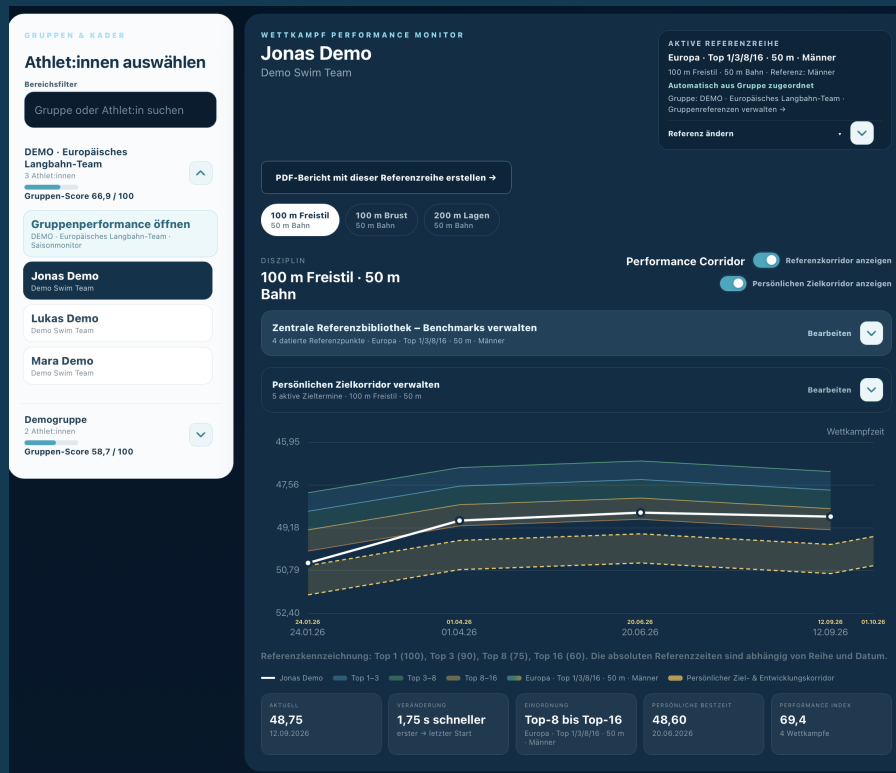


A PRODUCT OF SCHWIMMTRAINER.AT

Athlete development and individual goals in direct comparison.

Practical performance management for competitive swimming coaches. Competition progress, diagnostic testing and development corridors within one coherent workspace.



What Performancelab connects

01 • TRAINING PERFORMANCE

Track strength, endurance, speed, mobility and coordination using standardised assessments and repeat measurements.

02 • COMPETITION PERFORMANCE

Document competitions, planned starts and results, then follow the development of each event over time.

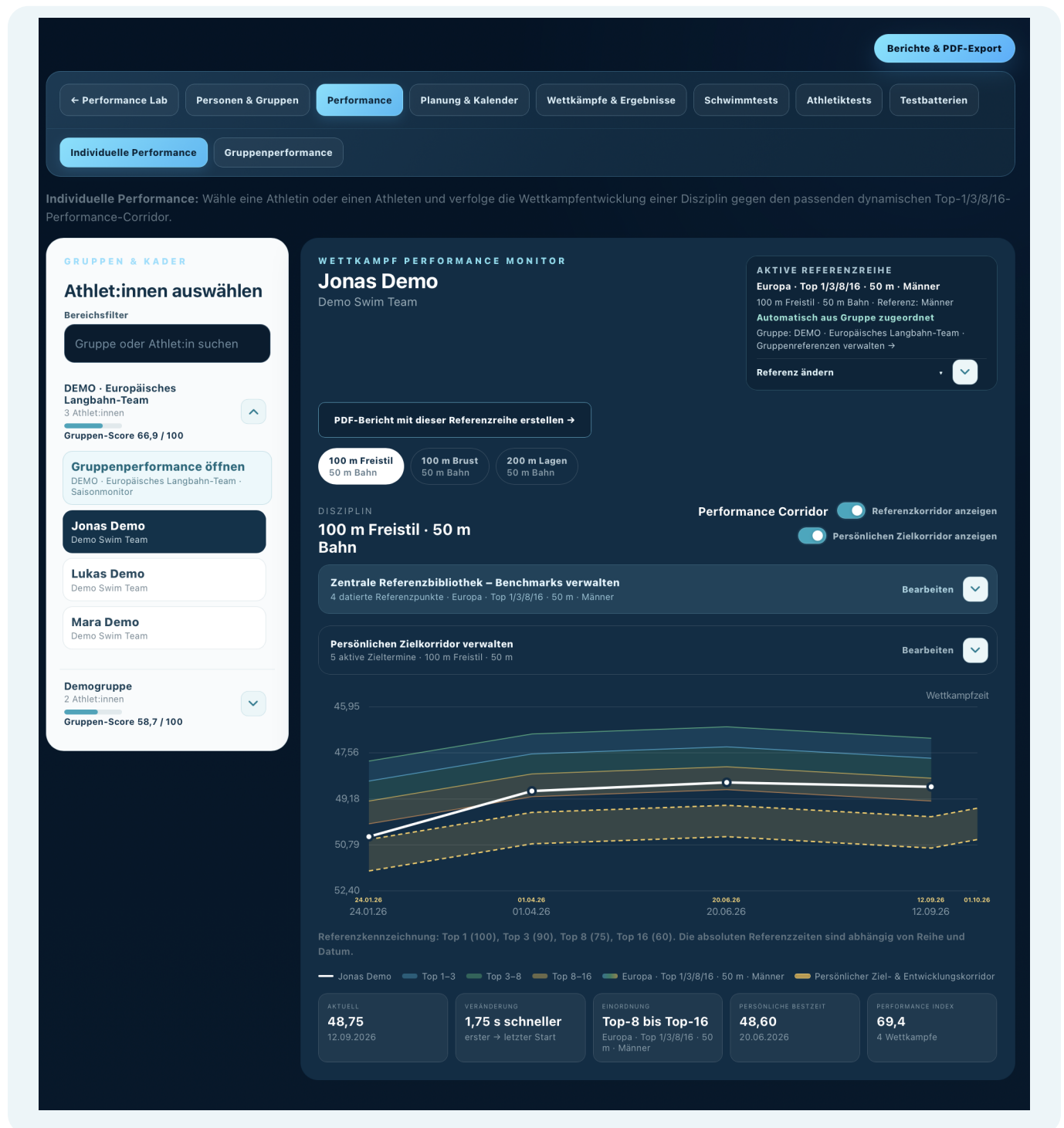
03 • DEVELOPMENT CORRIDORS

View individual goals alongside dated national or international Top 1/3/8/16 benchmarks, with reference standards selected for each coaching group.

Create athletes and groups → plan competitions and diagnostics → record results → choose goals and references → review trends, performance scores and reports. Invited athletes may review authorised results.

01 / 16 · CASE STUDY

Competition Performance Monitor



The overview connects athletes or groups, race times, current performance ratings, personal goal corridors and the selected reference standard. Different groups can use different benchmark series.

02 / 16 · CASE STUDY

Document race progress



Repeated results in one event form a performance history over time.
This screenshot shows changes in race times, not the planning of future starts.

03 / 16 · CASE STUDY

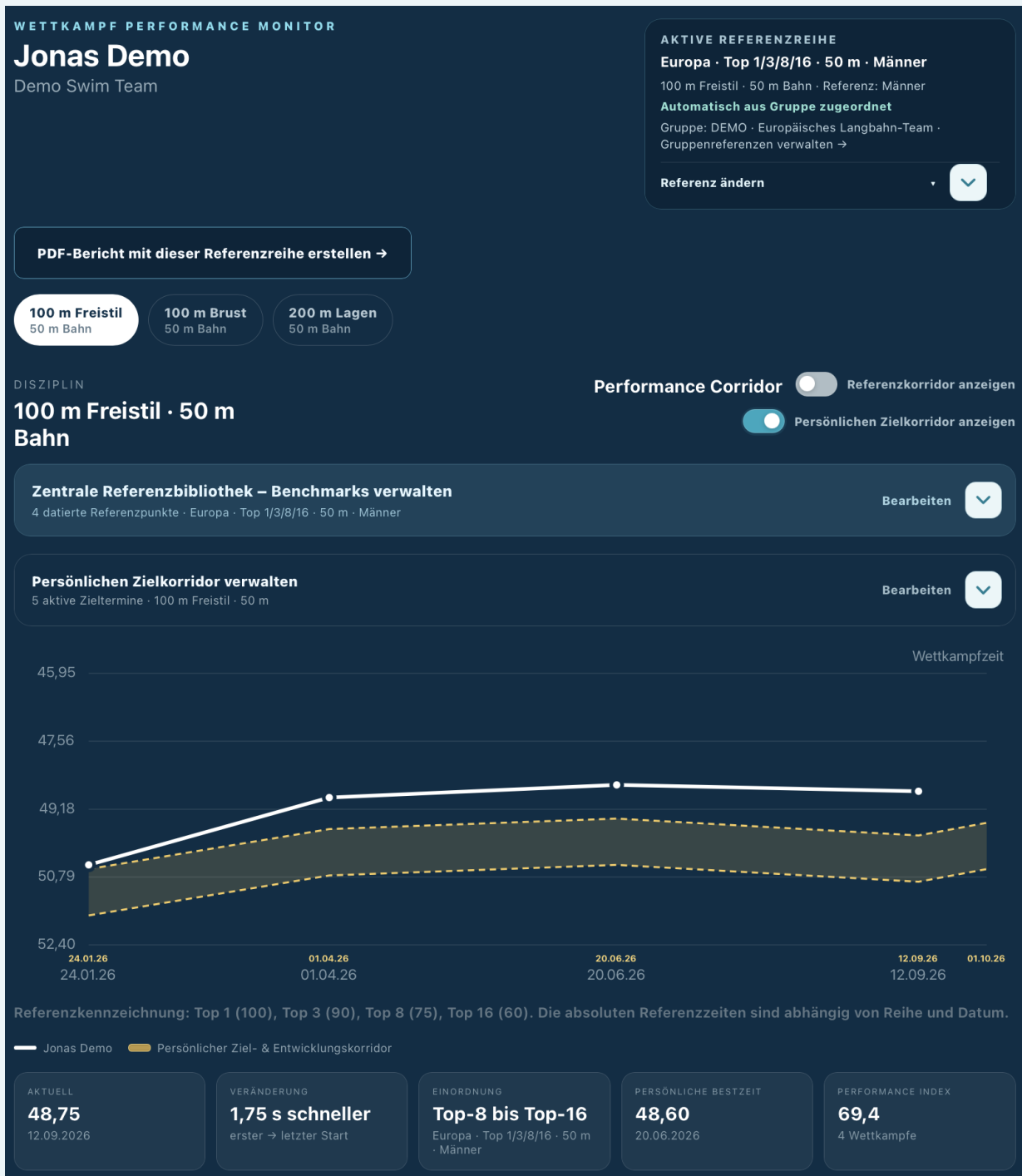
Set meaningful individual goals



Coaches establish dated development corridors with faster and slower limits. These are individual planning goals, deliberately separate from objective benchmark data.

04 / 16 · CASE STUDY

Evaluate progress against individual targets



Actual results appear alongside the individual target corridor, showing whether planned goals have been met or exceeded. A chart alone cannot establish that a particular training intervention caused the improvement.

05 / 16 · CASE STUDY

Top 1/3/8/16 benchmark library

Zentrale Referenzbibliothek – Benchmarks verwalten
4 datierte Referenzpunkte · Europa · Top 1/3/8/16 · 50 m · Männer

Bearbeiten

Gemeinsam nutzbare Referenzwerte

Diese zentrale Bibliothek enthält gemeinsame Referenzreihen. Änderungen und Löschungen wirken auf alle Gruppen und Personen, die diese Reihe verwenden. Wenn du die Referenz nur bei einer Person entfernen willst, benutze oben „Referenz ändern“. Top 1 ≤ Top 3 ≤ Top 8 ≤ Top 16.

Disziplin

Referenzreihe

Auswahl anzeigen

100 m Freistil · 50 m

Europa · Top 1/3/8/16 · 50 m · I

Referenzreihe bearbeiten oder neue anlegen

Statischen Alt-Korridor bearbeiten

Datierte Benchmarkpunkte · Europa · Top 1/3/8/16 · 50 m · Männer
50 m Bahn · Freistil · 100 m

Referenzdatum

Top 1 – Zeit

Top 3 – Zeit

Top 8 – Zeit

Top 16 – Zeit

21.10.2026

1:04,25

1:04,25

1:04,25

1:04,25

Bezeichnung (optional)

Quelle (optional)

Benchmark speichern

24.01.2026 · Winter Long Course Meet · regional
Top 1 47,85 · Top 3 48,55 · Top 8 49,25 · Top 16 50,05

Bearbeiten

Löschen

01.04.2026 · European LC Series · international
Top 1 46,90 · Top 3 47,60 · Top 8 48,30 · Top 16 49,10

Bearbeiten

Löschen

20.06.2026 · Summer Long Course Cup · championship
Top 1 46,65 · Top 3 47,35 · Top 8 48,05 · Top 16 48,85

Bearbeiten

Löschen

12.09.2026 · Autumn Performance Meet · mixed
Top 1 47,05 · Top 3 47,75 · Top 8 48,45 · Top 16 49,25

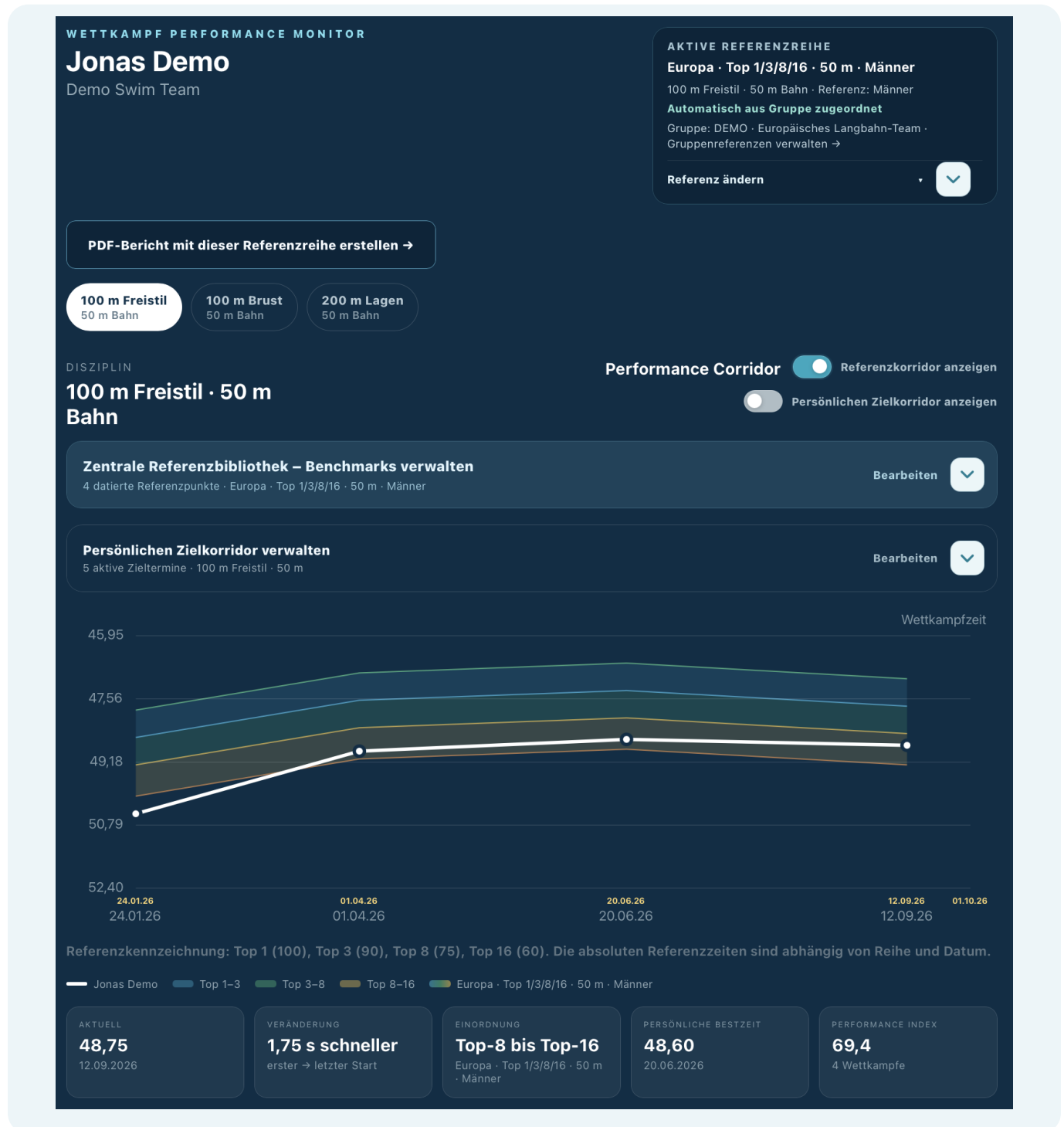
Bearbeiten

Löschen

Dated times for the top 1, 3, 8 and 16 athletes can be recorded by event, pool length, reference group and source. A central series may be explicitly assigned to more than one coaching group.

06 / 16 · CASE STUDY

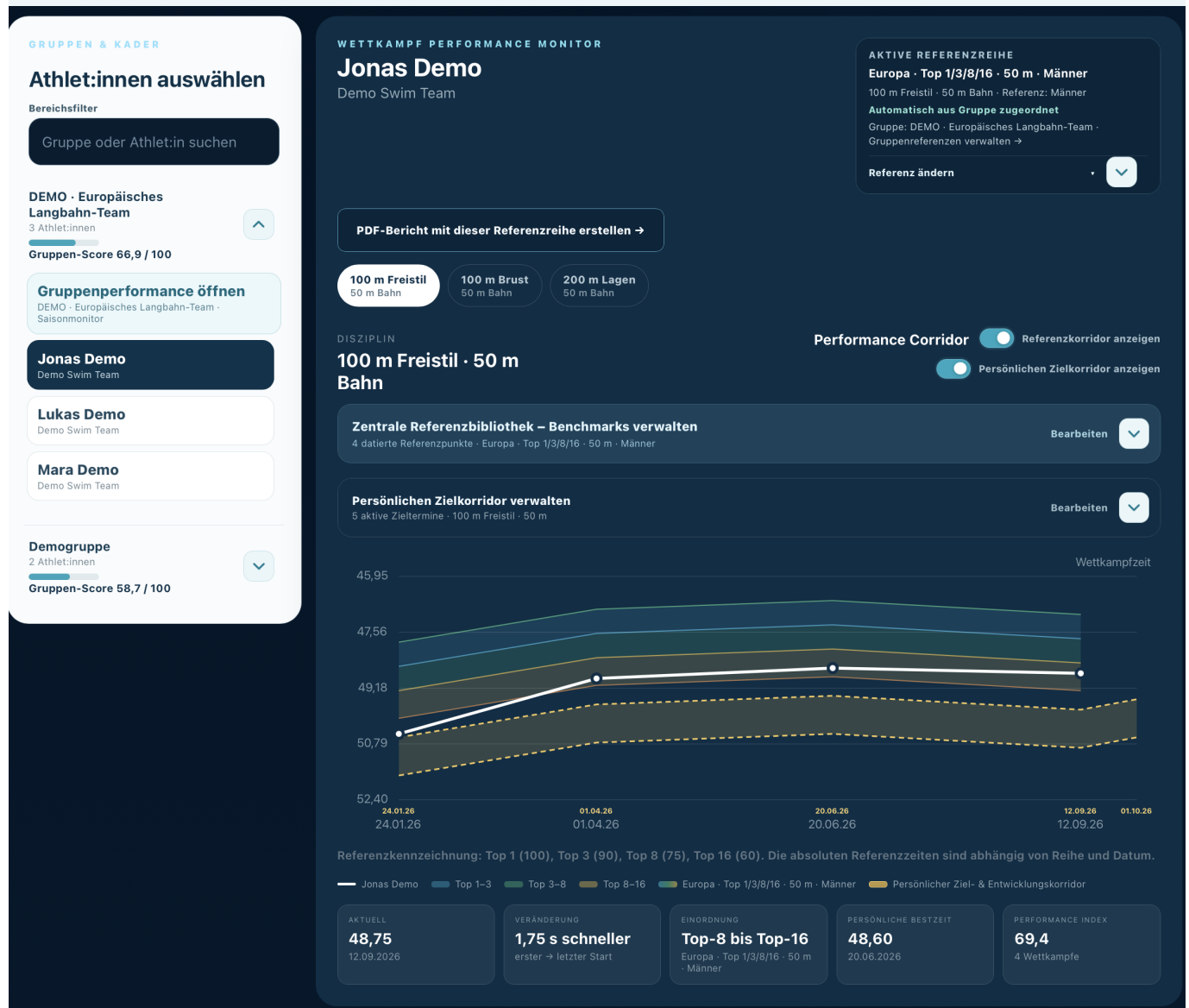
International reference corridors



Saved Top times form a dated comparison corridor. Coaches can see how their athletes develop against selected national or international performance levels.

07 / 16 · CASE STUDY

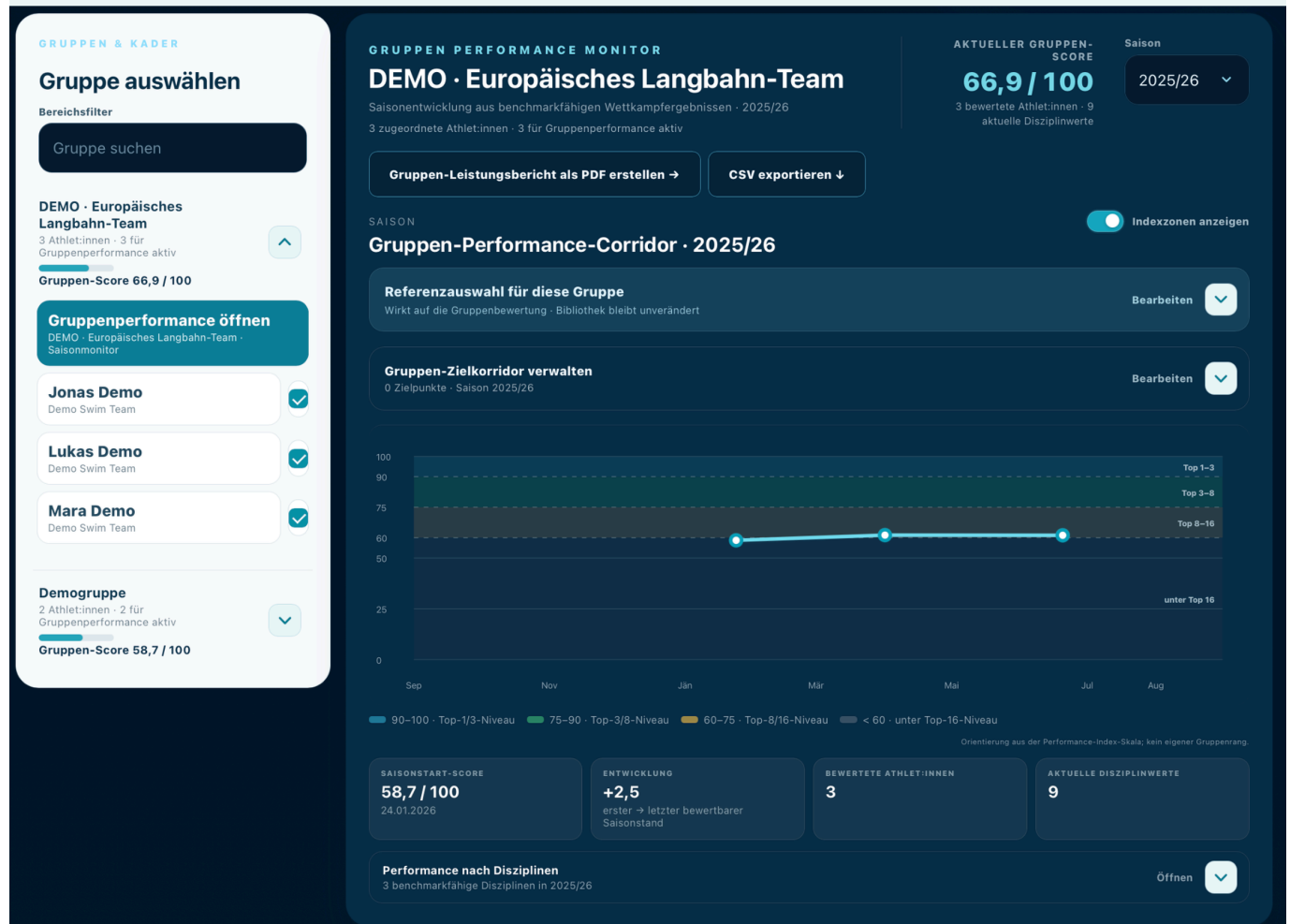
Three perspectives in one chart



The main comparison combines recorded race performances, individual goal corridors and suitable national or international reference bands.

08 / 16 · CASE STUDY

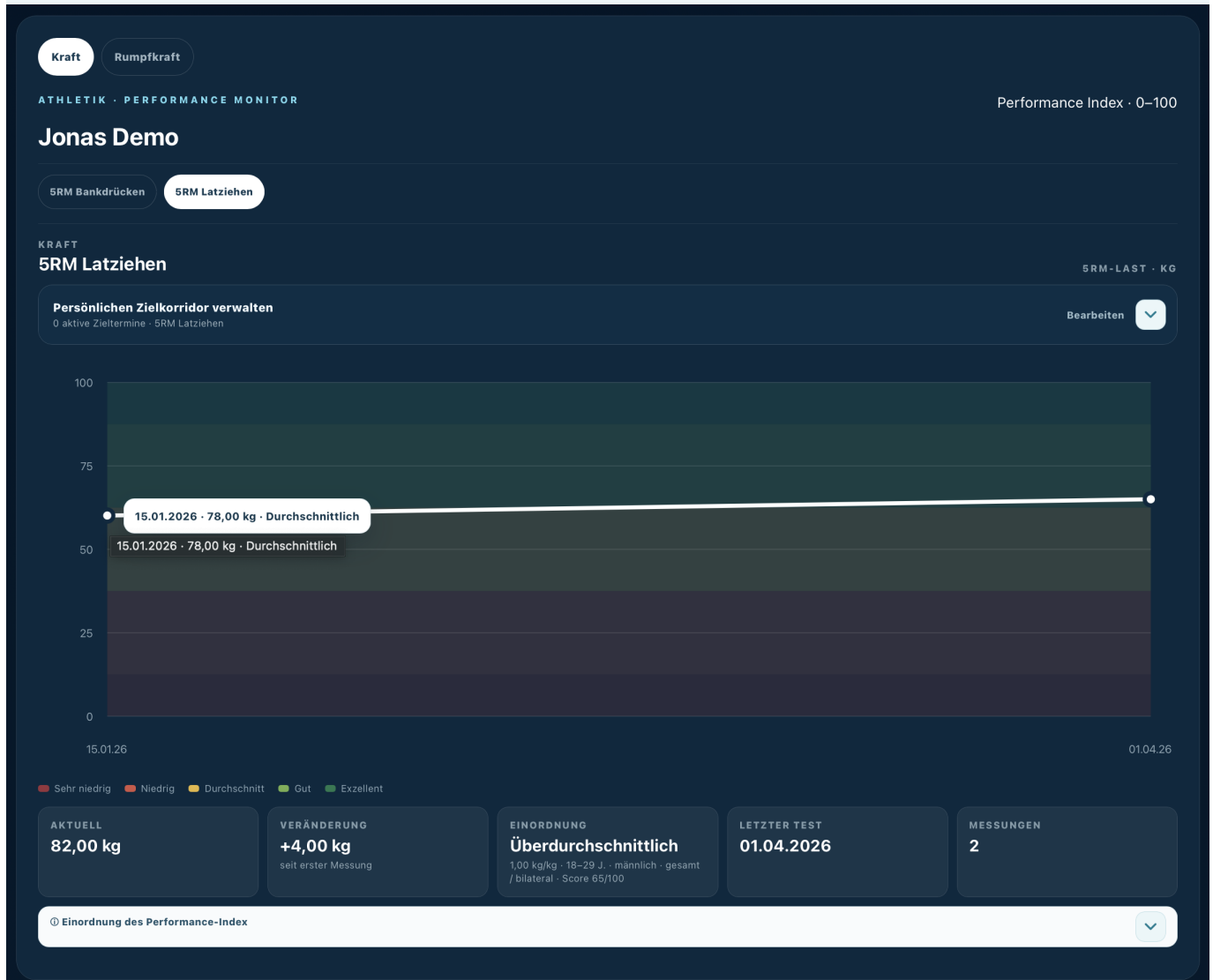
Group performance across the season



Each group can use its own comparison standard. The Group Performance Monitor then displays seasonal trends and a group performance score; emerging athletes need not be assessed against the same standard as elite squads.

09 / 16 · CASE STUDY

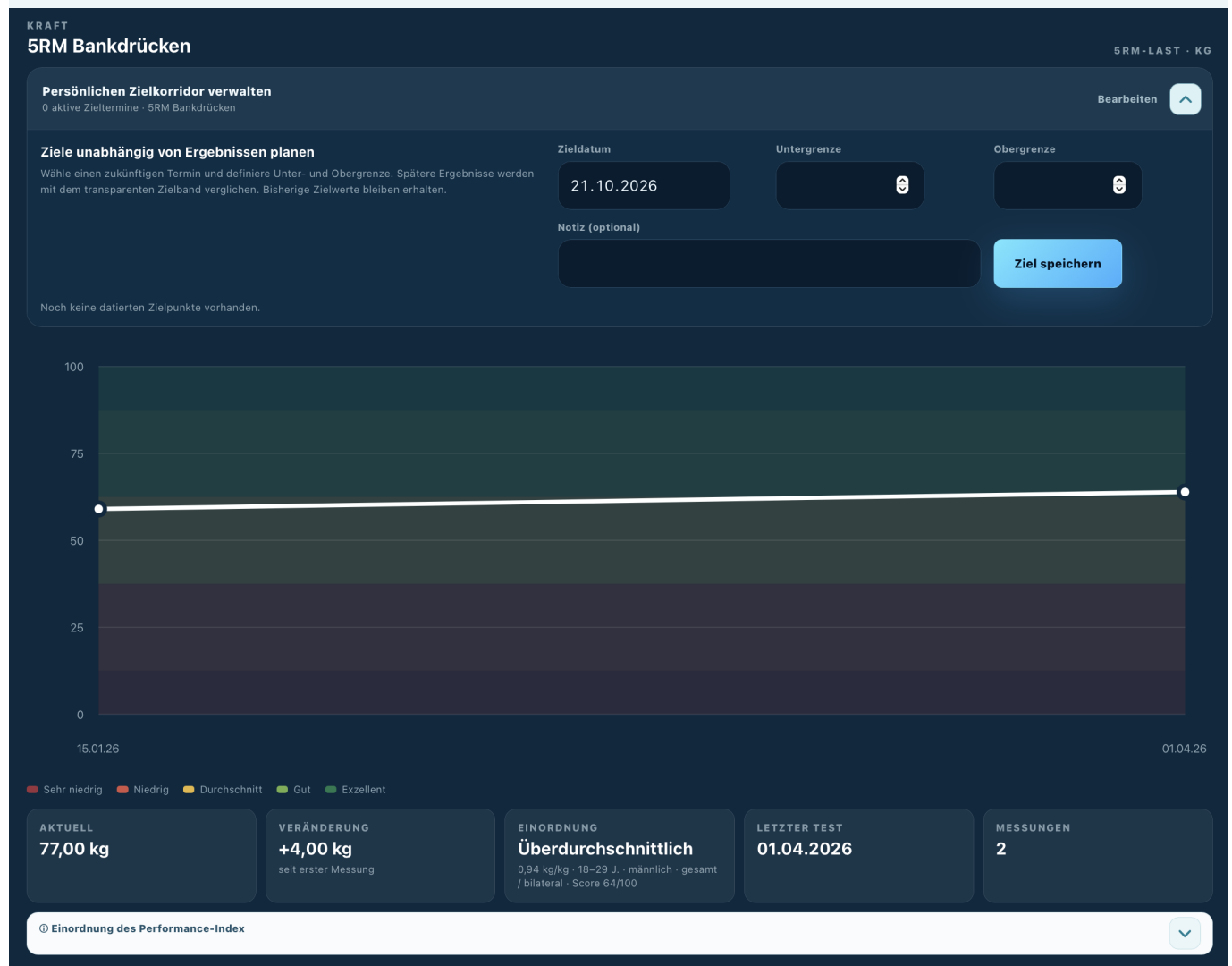
Track athletic testing over time



This screenshot shows the individual athletic monitor for the 5RM lat pulldown strength test. Test results, their progression and the performance index illustrate changes over time.

10 / 16 · CASE STUDY

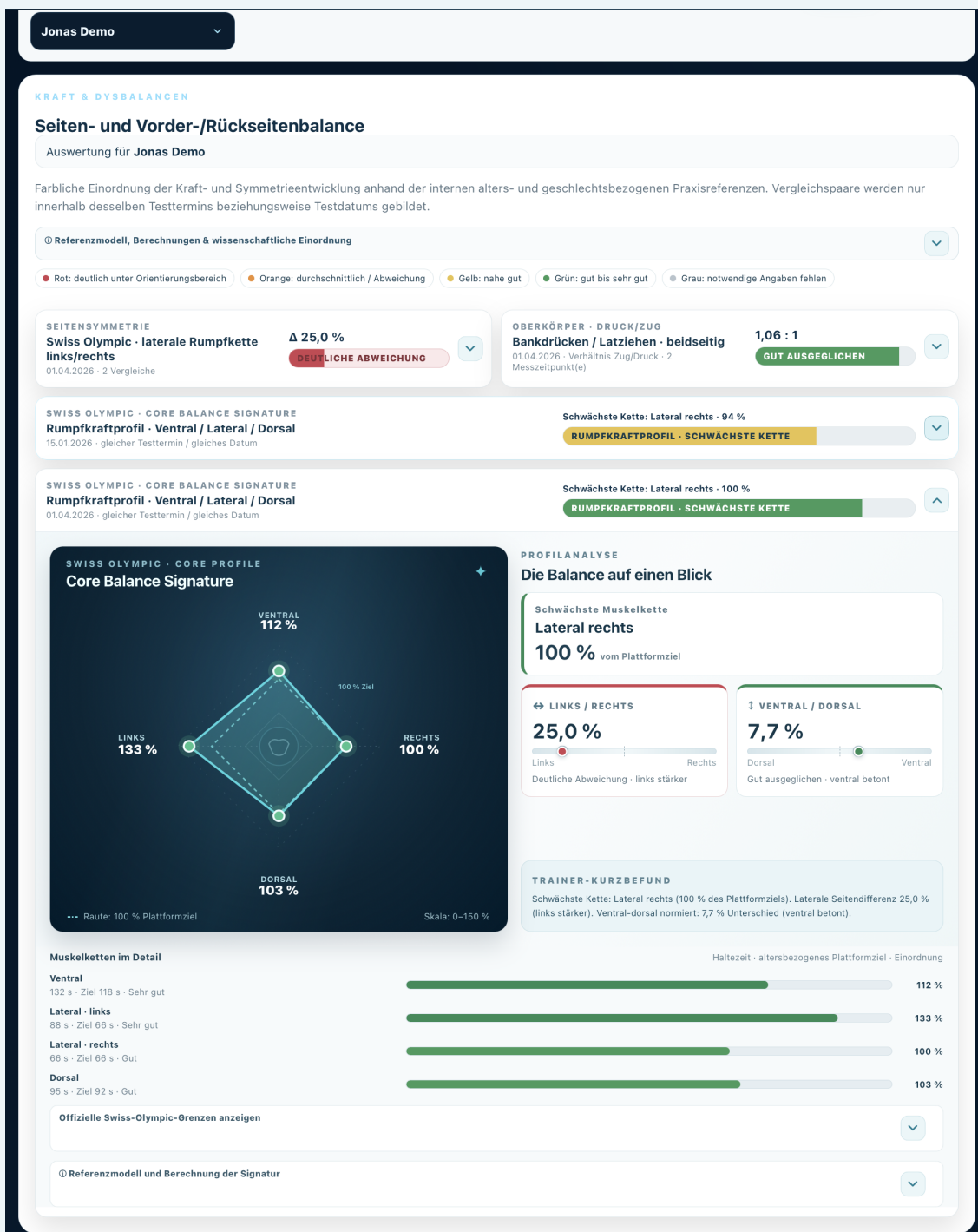
Manage athletic target corridors



The screenshot shows how individual development targets for an athletic test are managed. No active target points have yet been entered for the selected test.

11 / 16 · CASE STUDY

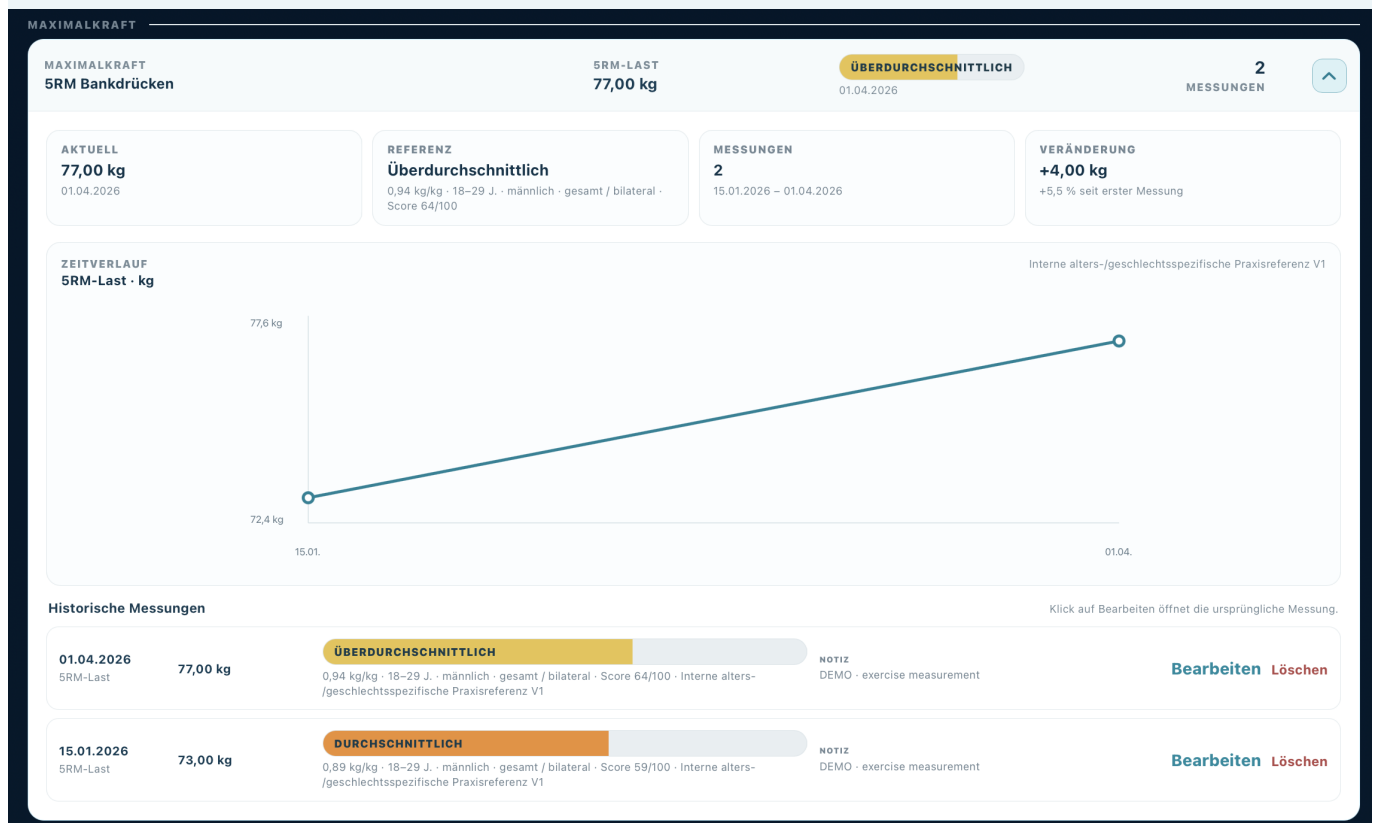
Balance and core-strength assessment



Linked test pairs show left-right differences and functional relationships, such as knee extensor/flexor ratios. The Swiss Olympic core-strength approach considers anterior, posterior and lateral chains.

12 / 16 · CASE STUDY

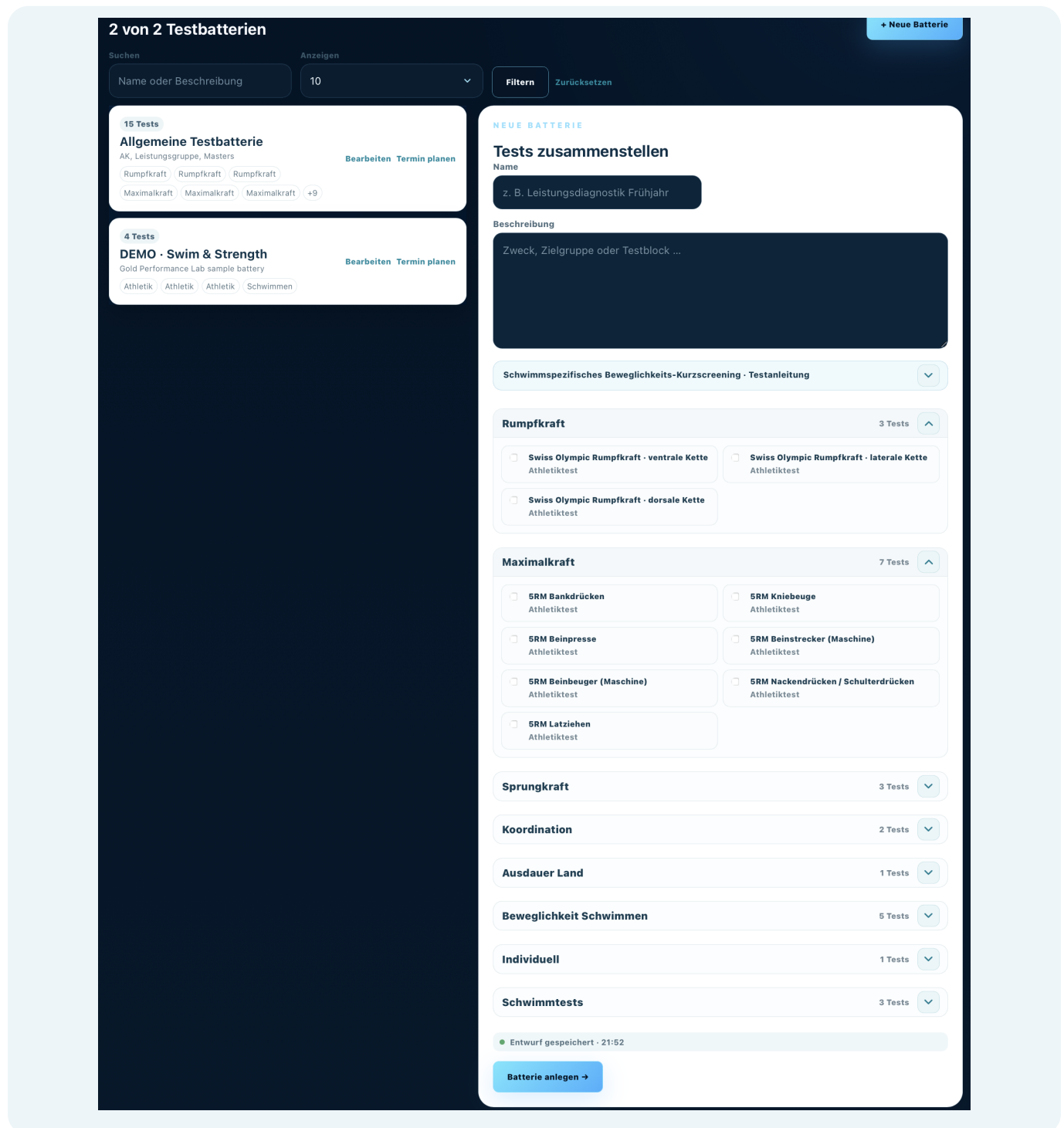
Detailed strength-test review



Historical 5RM measurements, current results and reference-based interpretation are shown together. Coaches can examine changes and discuss unusual trends.

13 / 16 · CASE STUDY

Build custom test batteries



This screenshot shows how existing individual tests are combined into a test battery. It illustrates test selection and combination, rather than scheduling or group assignment.

14 / 16 · CASE STUDY

Pyne aerobic step test

AUSWAHL
Jonas Demo
Demo Swim Team

SCHWIMMTESTS
1
gespeicherte Testtermine

LETZTER TEST
12.03.2026
Pyne 7x200 m

SCHWELLEN
manuell
keine automatische LTP/HRTP-Berechnung

STANDARDISIERTES PROTOKOLL

Aerobes Test nach Pyne · 7x200 m
 Sieben 200-m-Stufen mit Start alle 5:00 min. Die Richtzeit beginnt bei PB +35 s und wird pro Stufe um 5 s verkürzt; Stufe 7 liegt damit bei PB +5 s. HF wird nach Anschlag, Laktat jeweils 1 min nach Anschlag erfasst. Nach der letzten Stufe können Nachbelastungswerte bei 1, 3, 5, 7 und 10 min dokumentiert werden.

ANZAHL STUFEN
7

STRECKENLÄNGE
200 m

STARTZEIT
5:00 min

ANFANGSRICHTZEIT
PB +35 s

BELASTUNGSANST
-5 s / Stufe

NACHBELASTUNG
1 · 3 · 5 · 7 · 10 min

Athlet:in Testdatum

Beckenlänge Schwimmlage 200-m-PB

Für diese Lage/Bahn ist keine 200-m-Wettkampf-PB gespeichert. PB bitte manuell eingeben.

Titel

7 x 200 m
 Richtzeiten werden aus der PB automatisch berechnet. Erholung = 5:00 min minus Istzeit.

STUFE	VORGABE	RICHTZEIT	ISTZEIT	Δ SOLL	ZYKLUSFREQUENZ	HF NACH ANSCHLAG	LAKTAT +1 MIN	ERHOLUNG
1	PB +35 s	<input type="text"/>	<input type="text" value="Istzeit"/>	-	<input type="text" value="Zyklus"/>	<input type="text" value="bpm"/>	<input type="text" value="mmol/l"/>	-
2	PB +30 s	<input type="text"/>	<input type="text" value="Istzeit"/>	-	<input type="text" value="Zyklus"/>	<input type="text" value="bpm"/>	<input type="text" value="mmol/l"/>	-
3	PB +25 s	<input type="text"/>	<input type="text" value="Istzeit"/>	-	<input type="text" value="Zyklus"/>	<input type="text" value="bpm"/>	<input type="text" value="mmol/l"/>	-
4	PB +20 s	<input type="text"/>	<input type="text" value="Istzeit"/>	-	<input type="text" value="Zyklus"/>	<input type="text" value="bpm"/>	<input type="text" value="mmol/l"/>	-
5	PB +15 s	<input type="text"/>	<input type="text" value="Istzeit"/>	-	<input type="text" value="Zyklus"/>	<input type="text" value="bpm"/>	<input type="text" value="mmol/l"/>	-
6	PB +10 s	<input type="text"/>	<input type="text" value="Istzeit"/>	-	<input type="text" value="Zyklus"/>	<input type="text" value="bpm"/>	<input type="text" value="mmol/l"/>	-
7	PB +5 s	<input type="text"/>	<input type="text" value="Istzeit"/>	-	<input type="text" value="Zyklus"/>	<input type="text" value="bpm"/>	<input type="text" value="mmol/l"/>	-

NACHBELASTUNGSWERTE
Laktat nach der letzten Stufe
 Messpunkte bei 1, 3, 5, 7 und 10 Minuten nach Anschlag.

+1 min

+3 min

+5 min

+7 min

+10 min

TRAINERINTERPRETATION
Schwellenpositionen
 LTP1/LTP2 und HRTP1/HRTP2 bleiben manuelle Trainerinterpretationen. Zwischenpositionen wie 3,5 sind möglich.

LTP1 -
Stufenposition

LTP2 -
Stufenposition

HRTP1 -
Stufenposition

HRTP2 -
Stufenposition

Notizen / Interpretation

Pyne-Test speichern →

* Eingaben werden automatisch als Entwurf zwischengespeichert.

The 7x200 m protocol provides a structured record of stage times, heart rate, lactate readings and recovery samples. Valid interpretation depends on correct test procedures.

15 / 16 · CASE STUDY

Pansold swimming step test

AUSWAHL
Jonas Demo
Demo Swim Team

SCHWIMMTESTS
1
gespeicherte Testtermine

LETZTER TEST
12.03.2026
Pyne 7x200 m

SCHWELLEN
manuell
keine automatische LTP/H RTP-Berechnung

SCHWIMMART- UND STRECKENSPEZIFISCHER STUFENTEST
Stufentest nach Pansold
Fünf ansteigende Belastungsstufen (80 / 85 / 90 / 95 / 100 % der Bestzeitgeschwindigkeit). Der dokumentierte 100-m-Standard sieht 3 / 2 / 1 / 1 / 1 Wiederholungen vor. Die 200-m-Variante ist ausdrücklich eine Anpassung mit einer Wiederholung pro Stufe. Sollzeiten werden aus der schwimmlagen-, strecken- und beckenbezogenen Wettkampfbestzeit oder einer manuell eingegebenen Bestzeit berechnet.

Athlet:in
Jonas Demo

Testdatum
21.10.2026

Beckenlänge
50 m

Schwimmlage
Freistil

Teststrecke
100 m · Standard

Wettkampfbestzeit
48.60

Titel
Pansold-Stufentest - 100 m

Gespeicherte Wettkampf-PB:
48,60 - DEMO - Summer Long
Course Cup - 2026-06-20
[gespeicherte PB übernehmen](#)

8 x 100 m / 5 Stufen - Standard
Richtzeiten auf Basis der Geschwindigkeit. HF unmittelbar nach Anschlag, Laktat zum ausgewiesenen Messzeitpunkt; Pausen nach Protokoll.

DURCHGANG / STUFE	INTENSITÄT	RICHTZEIT	ISTZEIT	ZYKLUSFREQUENZ	HF BPM	LAKTAT MMOL/L	MESSZEIT	PA
1 / 1	80 % vPB	1:00,75	m:ss,cc	0	0	0	direkt	01:
2 / 1	80 % vPB	1:00,75	m:ss,cc	0	0	0	direkt	01:
3 / 1	80 % vPB	1:00,75	m:ss,cc	0	0	0	direkt	03:
4 / 2	85 % vPB	0:57,18	m:ss,cc	0	0	0	direkt	01:
5 / 2	85 % vPB	0:57,18	m:ss,cc	0	0	0	direkt	03:
6 / 3	90 % vPB	0:54,00	m:ss,cc	0	0	0	+1 min	05:
7 / 4	95 % vPB	0:51,16	m:ss,cc	0	0	0	+3 min	20:
8 / 5	100 % vPB	0:48,60	m:ss,cc	0	0	0	+1/4/7/10 min	-

Die letzte Belastung wird maximal geschwommen; die aus der PB errechnete Richtzeit ist keine garantierte Leistung. Bei 200-m-Tests liegt eine modifizierte Wiederholungsstruktur vor. Laktatmessung, Pausen und Zeitpunkt bitte im Protokoll beachten.

PANSOLD - NACHBELASTUNG
Maximales Laktat nach der letzten Stufe
Kontrollen 1, 4, 7 und 10 Minuten nach Anschlag. Der höchste gemessene Wert wird als Lmax dokumentiert.

+1 min
mmol/l 0

+4 min
mmol/l 0

+7 min
mmol/l 0

+10 min
mmol/l 0

TRAINERINTERPRETATION
LTP1 / LTP2 / H RTP1 / H RTP2
Manuelle Zuordnung nach Durchgangsposition (100 m: 1-8, 200 m: 1-5), Zwischenpositionen möglich. P4 ist nicht LTP2.

LTP1 - Durchgang
0

LTP2 - Durchgang
0

H RTP1 - Durchgang
0

H RTP2 - Durchgang
0

Notizen / Interpretation
Belastungssteuerung, Messbedingungen, besondere Befunde ...

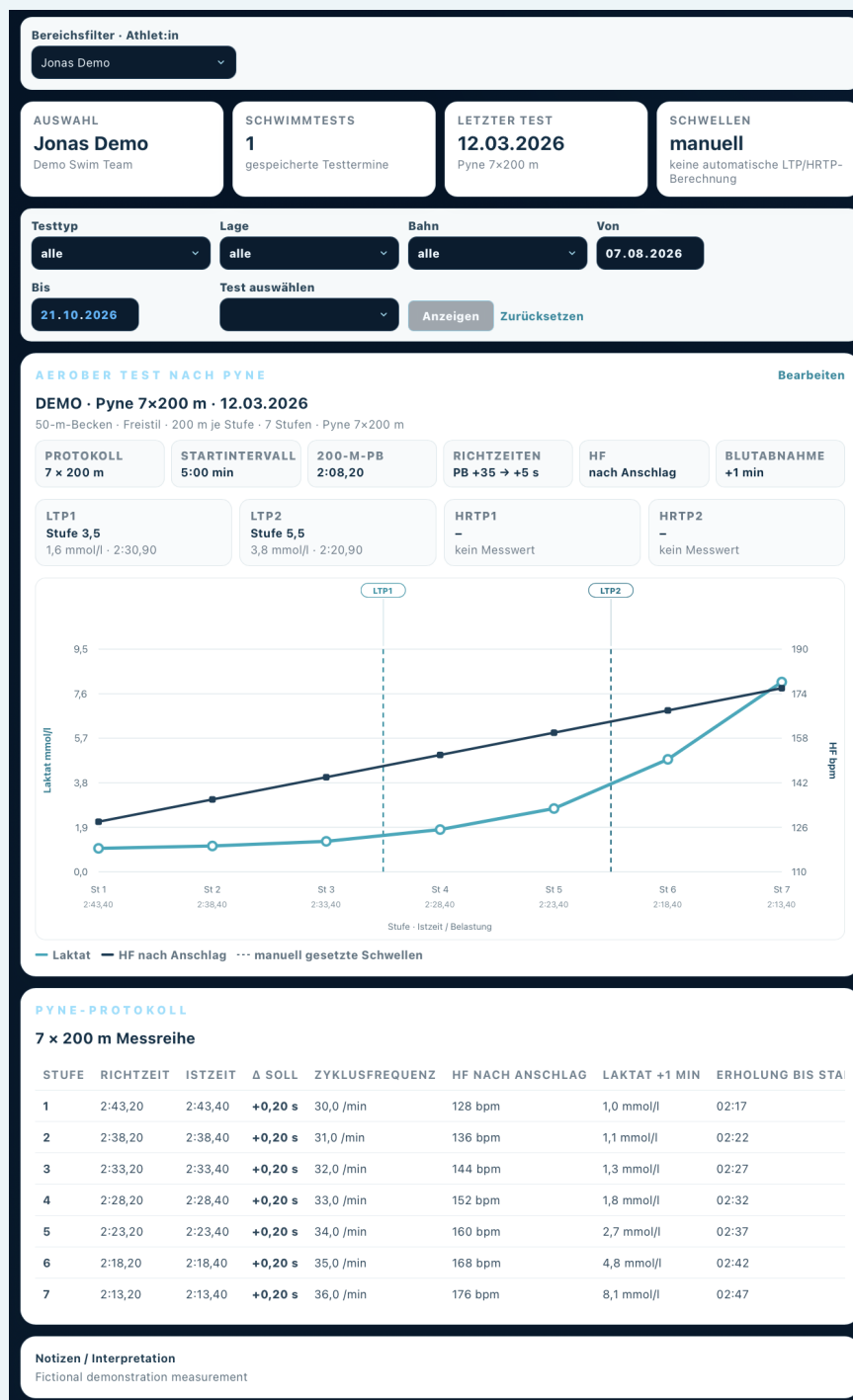
Pansold-Test speichern →

* Eingaben werden automatisch als Entwurf zwischengespeichert.

The Pansold protocol documents swimming-specific test stages, target intensities, times, heart rates, lactate measurements and post-exercise readings.

16 / 16 · CASE STUDY

Review swimming test results



Stored results can be reviewed in charts and tables, including lactate and heart-rate trends. Thresholds and professional interpretation may be documented; the system does not replace medical assessment.

01 / 05

Turn training results into informed decisions

Performancelab brings together three perspectives: training performance, race performance, and dated development and reference corridors.

Beyond athlete administration

Athletes, training groups, squads and their development belong together. Performancelab connects athlete records, competitions, swimming and strength testing, and analysis in one workspace.

Three performance perspectives

Training performance reveals changes in physical capabilities. Race performance shows results and trends. Development and reference corridors put those results alongside individual targets and national or international benchmarks.

Give athletes visibility of their progress

Following a secure invitation, authorised athletes can see shared results, progress and analysis. Coaching records remain under the coach's control.

01 / 05

Turn training results into informed decisions

Performancelab brings together three perspectives: training performance, race performance, and dated development and reference corridors.

Record, analyse and share

Analyse test and competition results over time and preserve selected findings in tailored PDF reports. Separate measurements become a clear record of development.

02 / 05

Competition development: from race to next goal

A case study featuring three demo athletes shows how competition planning, results and individual progress fit together.

Create athletes and groups

The coach first creates three athletes and assigns them to a group – for example, a club, squad or age category. This establishes the organisational context for their results and benchmarks.

Plan meets and record results

Record results from past or current meets. For future competitions, plan entries, events and objectives. Once the race results are entered, they feed directly into the athlete's performance history.

See the performance trend

Several results in the same event reveal a performance trend over time. The coach can see whether and how race times change over weeks or months.

02 / 05

Competition development: from race to next goal

A case study featuring three demo athletes shows how competition planning, results and individual progress fit together.

Set meaningful personal targets

Ahead of the next event, the coach defines dated and realistic target ranges. In the example, Jonas Demo progresses faster than his planned target corridor; the chart makes the difference clear. This illustrates progress without assuming that a graph alone proves the cause.

Compare targets with leading times

One chart brings together race results, personal targets and national or international reference bands. The question is no longer just “Was the target met?” but also “Where do we stand in a competitive context?”.

03 / 05

Put performance into the right context

Not every squad pursues the same objectives. Group-specific references support meaningful assessment of national youth groups and international elite squads.

Dated Top 1 / 3 / 8 / 16 benchmarks

For each event, Top 1, Top 3, Top 8 and Top 16 times can be recorded for different dates in a season – for instance using national or European results. These create time-dependent reference corridors.

Reference bands in the same chart

Overlay athletes' competition performances with the selected leading times to see how the gap to the top 16 changes. Both the chosen benchmark series and its dates remain identifiable.

The right standard for every group

A youth squad may use national standards while a senior or elite squad uses international benchmarks – even when the event and pool length are identical. Individual exceptions remain possible.

03 / 05

Put performance into the right context

Not every squad pursues the same objectives. Group-specific references support meaningful assessment of national youth groups and international elite squads.

Understand collective progress

The Group Performance Monitor evaluates selected athletes against their applicable group-specific reference standards. Group scores and seasonal trends give the coach a view of the squad as a whole.

04 / 05

Athletic testing: track progress beyond race times

Record strength, endurance, mobility, speed and co-ordination using practical tests, appropriate reference data and progress tracking.

Practical physical performance tests

Assign tests such as the 5RM bench press and other strength, mobility, speed, endurance and co-ordination assessments to athletes. Where suitable reference data exist, results can be interpreted against age-, sex- and, where applicable, anthropometry-specific values.

Detailed strength-test progress

For 5RM strength tests, coaches can review results across testing dates, their individual interpretation and the reference basis in a single detailed view.

Plan test batteries and appointments

Combine available tests into bespoke test batteries, schedule sessions and assign athletes or groups. Once measurements are recorded, results and trends are analysed within the platform.

04 / 05

Athletic testing: track progress beyond race times

Record strength, endurance, mobility, speed and co-ordination using practical tests, appropriate reference data and progress tracking.

Left-right and anterior-posterior balance

Linked test pairs help reveal side-to-side differences and muscular relationships, for example between left and right legs or between knee extensors and flexors. Findings must be interpreted in the context of each test.

Examine core-strength components

The incorporated Swiss Olympic core-strength testing approach looks at ventral, dorsal and lateral chains. The core-balance profile helps visualise notable relationships, possible deficits and areas for development.

Personal targets and long-term trends

Coaches can also set personal development corridors for athletic tests. Individual measurements are shown over time; a group performance score is not part of this athletic monitor in the current design.

05 / 05

Swimming tests: practical performance diagnostics

Pyne, Pansold and individual swimming tests support structured assessment of exercise responses and systematic training planning.

Pyne: 7 × 200 m incremental test

The Pyne protocol records seven 200 m stages with target pacing, together with measures such as heart rate and lactate, including post-exercise readings. Recorded values can be plotted and interpreted for training decisions.

Pansold: swimming-specific step test

The integrated Pansold test captures exercise stages, times, heart rates, lactate readings and post-exercise measurements in a structured format. Results remain available for a transparent performance-diagnostic assessment.

Lactate, heart rate and threshold trends

Performancelab visualises measures including lactate and heart-rate responses. Recorded thresholds and interpretations can be documented. Diagnostic conclusions depend on sound test procedures and expert interpretation.

05 / 05

Swimming tests: practical performance diagnostics

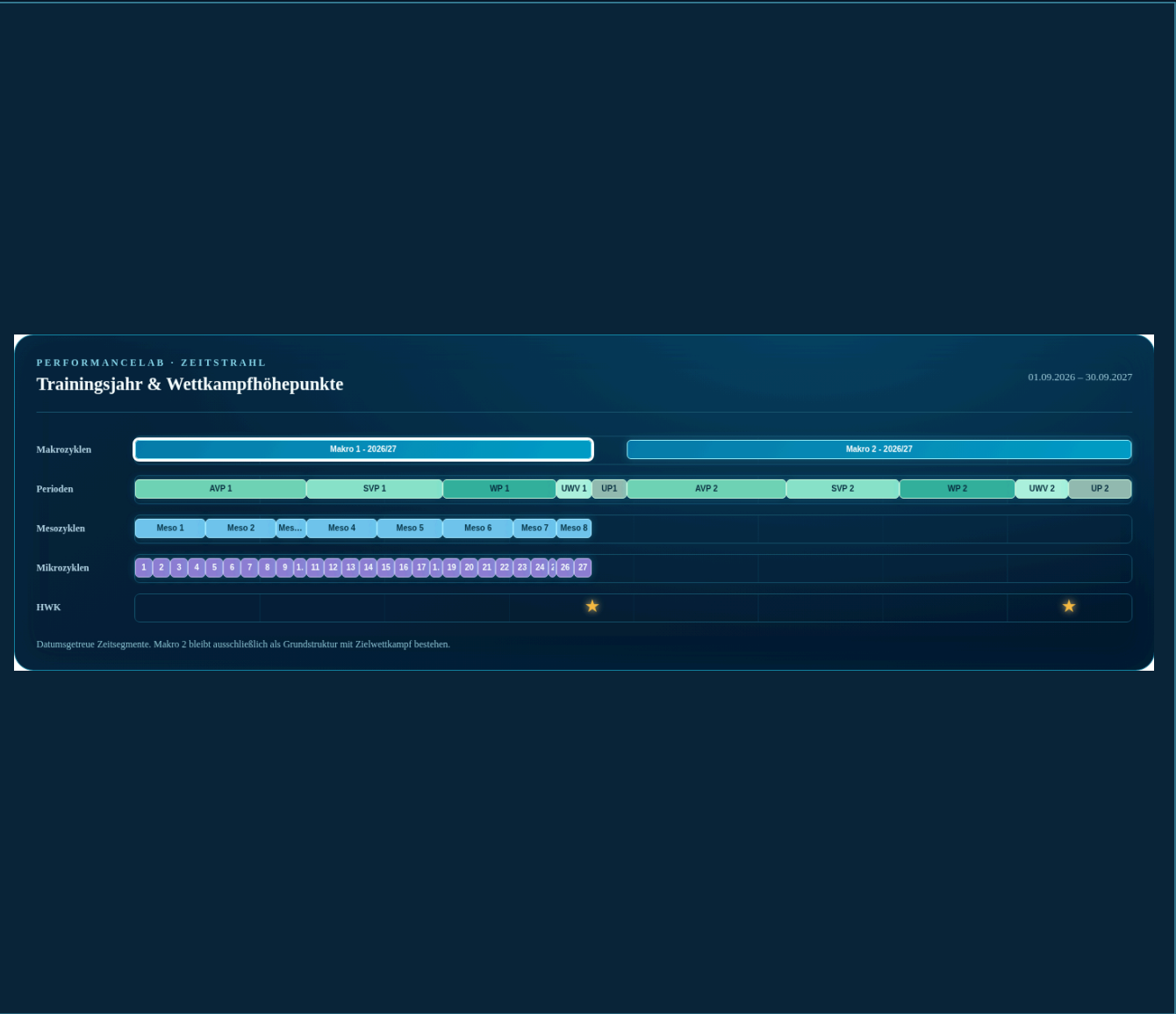
Pyne, Pansold and individual swimming tests support structured assessment of exercise responses and systematic training planning.

Review and share results promptly

Once saved, measurements are available in the relevant test and progress views. Authorised athletes may view shared results, while coaches can include selected findings in PDF reports.

From the training year to each interval

Structure a season, visualise macro-, meso- and microcycles, and place competitions and priority meets on a shared timeline. Coaches remain responsible for training decisions.



Jonas Demo 2026/27 · fictional timeline

Meaningful planned-versus-actual comparisons

The dashboard combines training volume, intensity and strokes with planned-versus-actual comparisons. Annual, weekly, session and statistics reports are available as PDFs. All actual results shown are fictional demonstration figures.



Fictional Jonas sample season · analytics overview

Built for coaches.

Available with Gold.

Performancelab is the private performance and diagnostics workspace of schwimmtrainer.at for eligible Gold members. Training and competition data, benchmarks, targets and reports are managed through each authorised account. It does not replace medical diagnosis or professional coaching judgement. This brochure describes the features at the time of publication.

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