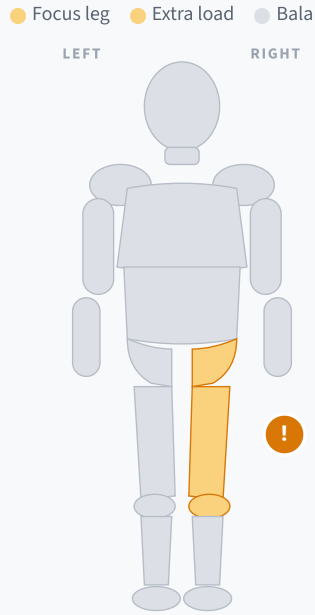
CATALYST PERFORMANCE · SAN DIEGO

NIVEDYA KRISHNAN

ACL Readiness Screen · SDSC

Date: 2026-06-11
Age: 15 yrs
Platform: VALD ForceDecks



Two-foot jump — single-leg view with full assessment · L/R

OVERALL
MONITOR

A side-to-side gap worth addressing. Based on the largest left-vs-right difference measured today (**15%**).

0% · 10% · balanced · 15% · 30%+

BIGGEST L/R GAP
15% gap
Target: <10% gap

JUMP HEIGHT RANK
23rd of 24
By jump height · 1st = highest

JUMP POWER
18.7 cm
Average · age 15

JUMP BALANCE — LEFT VS RIGHT

A jump has three phases — she **pushes off**, **loads & brakes** on the way down, then **lands**. We measure how evenly her legs share the work in each (shorter bar = more balanced; target under 10%). **Braking and landing are where most non-contact knee/ACL injuries happen**, so a big left-vs-right gap there is worth attention. The vertical line marks the **10% concern threshold** — bars reaching past it are flagged. (Landing can vary jump-to-jump; the single-leg assessment confirms.)

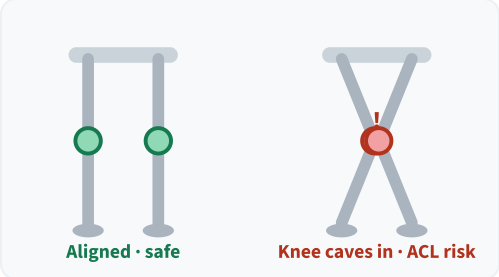
Push-off driving up		0%	On target
Load / brake slowing down		1%	On target
Landing absorbing impact		19%	Monitor

What this means. How she **absorbs landings** — from headers, jumps and challenges — is uneven, with one leg taking more of the impact — a modest left-vs-right difference. (Landing varies jump-to-jump, so the single-leg test confirms and pinpoints it.) A gap like this is one of the most established, **modifiable** risk factors for a non-contact knee injury — far better caught now, on a force plate, than after an injury. The good news: it's very trainable.

This is a movement **screen**, not a medical diagnosis. The next pages explain how an ACL injury happens, what this means for her game, her numbers, and the plan. Captured on VALD ForceDecks (dual force plates).

NIVEDYA — UNDERSTANDING THE RESULT

HOW A NON-CONTACT ACL INJURY HAPPENS



The **ACL** is the main ligament that stabilises the knee — it stops the shin sliding forward and the knee twisting inward. About **70% of ACL tears are non-contact:** they happen in a split second when an athlete **decelerates, lands, or cuts and the knee caves inward** (the position on the right).

A leg that's **weaker or less controlled is more likely to collapse into that position** — and less able to absorb the load — so the ligament takes the strain. **That's why a left-vs-right asymmetry matters: it flags the leg least able to handle the exact forces that tear an ACL.** For Nivedya, it's her **landing** — one leg taking more of the impact, where the knee can be driven inward.

WHAT THIS MEANS FOR NIVEDYA'S GAME

ON THE PITCH

- **Absorbing headers, jumps & tackles** — One leg takes more of the impact each time.
- **Stability on landing** — Uneven absorption can let the knee drift inward (valgus).
- **Confirmed with single-leg testing** — Landing varies jump-to-jump.

WHY IT MATTERS — THE EVIDENCE

- Female soccer players are **4–6× more likely** to tear an ACL than boys.
- About **70% are non-contact** — on cuts, decelerations and landings, the exact movements measured here.
- A left-vs-right gap over **10–15%** is a recognised, **modifiable** risk factor and a return-to-play standard.
- Soccer-specific neuromuscular training (FIFA 11+) cuts ACL injuries **30–50%** — and works best in youth.

Refs: Arendt & Dick 1995; Grindem 2016; Bishop 2018; Sadoghi 2012 (meta-analysis).

MORE THAN INJURY — PERFORMANCE

Symmetry isn't only protective — it's faster. The same balance that guards the knee also drives her game:

- **Acceleration & cutting** — Even drive off both legs means a quicker first step and sharper change of direction.
- **Power transfer** — Her jump of **18.7 cm** (Average for her age) is her explosive base — balanced legs put it into sprints, jumps and shots.
- **Durability** — When one leg isn't overworking, she fatigues less and stays available all season.

NIVEDYA — HER NUMBERS & PLAN

HOW NIVEDYA'S NUMBERS COMPARE

MEASURE	NIVEDYA	TARGET / REFERENCE	STATUS
Push-off balance (take-off)	0% gap	<10% gap	On target
Load / brake balance (decelerating)	1% gap	<10% gap	On target
Landing balance (impact)	19% gap	<10% gap varies; single-leg confirms	Monitor
Counter-movement jump height	18.7 cm	Average vs girls age 15	Baseline

Jump Height vs Girls Her Age (15) — **Nivedya 18.7cm · Average**

14 · below avg — avg 23 — above avg · 32 cm

Symmetry targets follow return-to-sport standards (≥90% limb symmetry). The jump-height benchmark is an approximate developmental reference for female youth, not a clinical percentile.

WHAT TO WORK ON — NIVEDYA'S TAKE-HOME

1. **Drop-and-stick landings** — Step off a low box, land soft on both feet with even weight, knees tracking over the toes — hold 2 seconds. Most non-contact ACL tears happen on stiff, uneven, knees-in landings.
2. **Single-leg landing holds** — A small hop, stick the landing on one leg and hold — mirror both sides to even them out.

Coach-led general guidance from today's screen — a starting point, not a prescription. The complimentary follow-up adds the single-leg test and turns this into a personalized, supervised plan with a re-test to show progress.

HOW WE CAN HELP — NEXT STEPS

FREE RESULTS CALL
Complimentary · 15 min

Walk through Nivedya's results with our staff and map out what to do next.

IN-DEPTH EVALUATION
$169 · 1 hour

A fuller VALD force-plate battery — more movements tested to pinpoint the cause and build her plan.

COMPLETE ASSESSMENT
$349 · 2 hours

The full VALD evaluation **plus** hands-on flexibility & mobility screening with our ATC on the table.

BOOK NIVEDYA'S SESSION

Recommended given today's result — reply to this email, text us, or talk to your coach — we'll get her started.

How this was measured. Captured on **VALD ForceDecks** — dual force plates sampling **1,000×/second**, the same system used by professional and national teams. Every value is the **average of 3 maximal jumps** for reliability, and compared against published youth-athlete reference ranges. Prepared by the Catalyst Performance team.