



CLINICAL PARTNER KIT · SAMPLE V0.2

Using Prism body scans in clinical care

A practitioner's guide to what a Prism scan measures, where each number comes from, how far to trust it, and how to get a scan worth interpreting. Written for the people who read results with patients, not for engineers.

For **clinical partners**

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One page for the point of care

2 · How a scan works

From a 10-second spin to a report

3 · Where the numbers come from

What drives each metric

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How to position Prism. Prism is a measurement and tracking tool. It supports assessment, goal setting and monitoring change. It does not diagnose. Clinical decisions stay with the practitioner, as they would with any body composition method.

Quick reference

The one page to keep next to you during a consult. Everything here is expanded in the modules that follow.

Prism scan · practitioner quick reference



THE NUMBERS TO USE

BODY COMPOSITION

Body-fat %

Benchmarked against DXA: within about 3.5 points on average, and more repeatable than DXA itself. Use the value.

MEASUREMENTS

Waist and waist-to-height ratio

Read straight off the 3D model, as close as a trained tape measurer. Under 0.5 is the common target.

PROTECT

Lean mass

The number to watch during weight loss: some lean loss is normal, but fat should fall much faster.

RISK SIGNAL

Visceral fat

Estimated from body shape, calibrated to DXA. A strong cardiometabolic risk indicator.

TRUST A SCAN WHEN

- The patient wore minimal clothing, or fitted gym wear
- They wore the same type of clothing as at baseline (minimal, or fitted)
- They weighed themselves just before scanning
- The change holds across two or more scans

DISCOUNT A SCAN WHEN

- Clothing was loose or bulky, or a different type from baseline
- Weight wasn't updated
- A single scan jumps against the trend

WHAT TO TELL PATIENTS

- "Your scan is benchmarked against DXA, the clinical reference for body composition."
- "Each scan is useful on its own. Over weeks, it tells us even more."
- "Scan in the same type of clothing, at the same time of day, after weighing yourself."

IF A RESULT LOOKS OFF

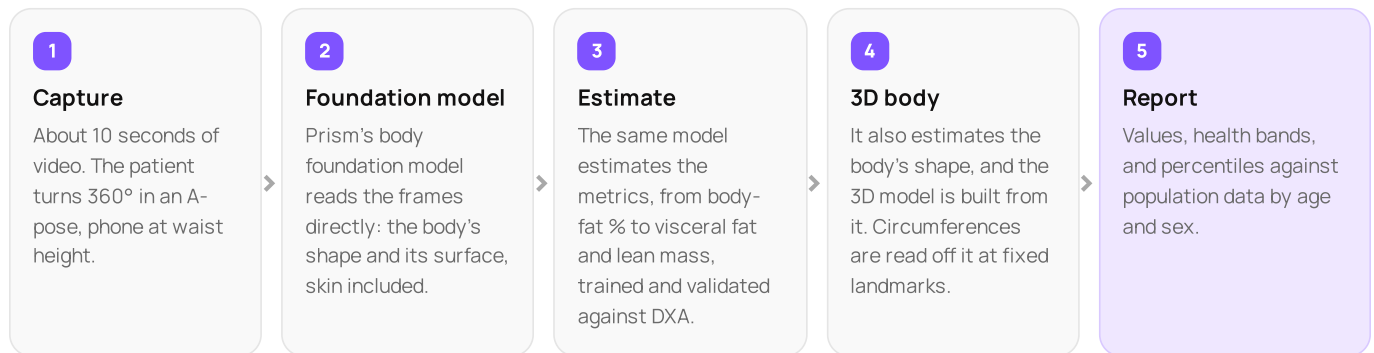
1 · Check how it was taken. Clothing, the weight entered that day, and scan conditions explain most surprises.

3 · Look at the drivers. If it still doesn't add up, Module 3 shows what feeds each number. Very muscular or very lean bodies are the usual reason.

2 · Rescan if needed. Same type of clothing as baseline, weighed just before. A real change shows up again.

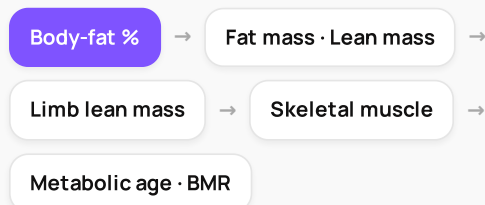
How a scan works

A patient turns once in front of their phone. Prism's body foundation model reads the video and estimates their body composition and 3D body shape directly from the images.



The one idea to remember

Almost every number in the report comes from **one body-fat estimate**. Once body-fat % is known, fat mass, lean mass and muscle follow by arithmetic. Get the scan right and everything downstream is right. Get it wrong (loose clothing, old weight) and every number shifts together.



What the models need from the patient

- **Body shape and surface**, read from the scan. Ideally as much visible skin as possible: the model reads the skin surface, not just the outline. Clothing that hides the body makes it look bigger than it is.
- **Current weight**, entered before every scan. Every mass value is a share of this weight.
- **Sex, age and height**, set once. Health bands and percentiles depend on sex and age.

Where the numbers come from

For each metric: what it's built from, what moves it most, and how much weight to give it. The bars show how strongly each input drives the result, relative to the strongest one.

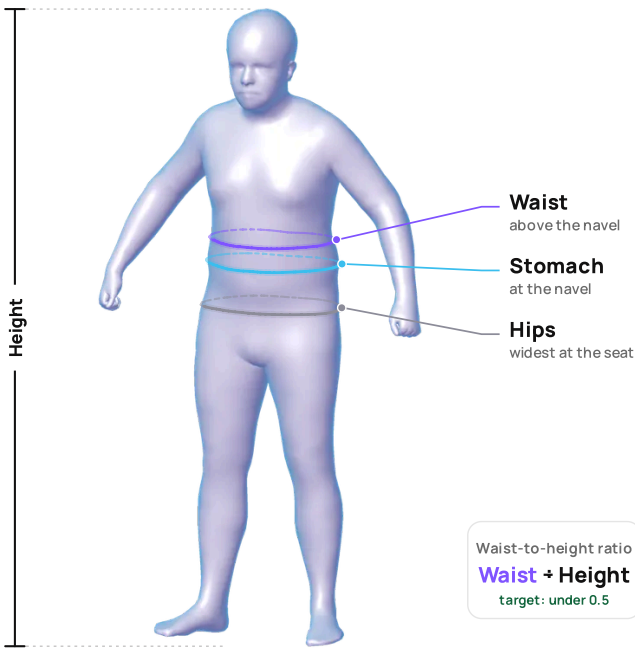
MEASURED · high confidence

ESTIMATED · benchmarked against DXA

DERIVED · for communication

Waist circumference and waist-to-height ratio

MEASURED



Read directly off the 3D model, not estimated. No model sits between the scan and the number. It's also the strongest input to body-fat % and visceral fat.

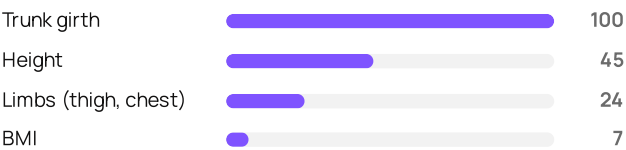
- **Waist** is the high waist, just above the navel.
- **Stomach** (low waist) is the widest point around the navel.
- **Waist-to-height ratio** is waist divided by height. Under 0.5 is the common target.
- The landmark is placed by the model the same way on every scan. Tape measurements vary with where the tape sits and how tight it's pulled.

Matching your protocol. If your clinic measures waist at a specific landmark (for example the iliac crest), check which of Prism's two values sits closest, and use that one consistently.

Body-fat %

ESTIMATED

A model trained against DXA. It combines two views of the body: one driven by trunk shape relative to height, one anchored to BMI.



Trunk girth (waist, stomach, hips) carries the most weight. When trunk girths rise together, which is what real fat gain looks like, the estimate moves strongly.

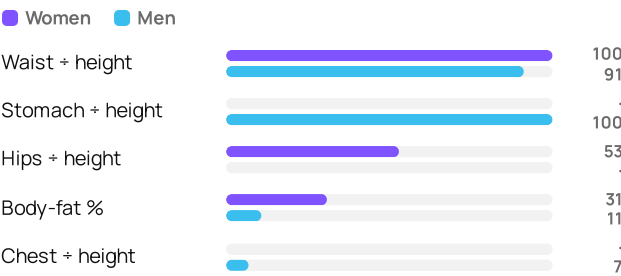
BAND	MEN	WOMEN
● Minimum	5 to 10%	13 to 18%
● Healthy	10 to 20%	18 to 28%
● High	20 to 25%	28 to 32%
● Very high	25% and above	32% and above

Bands adapted from ACE and ACSM guidelines.

Visceral fat

ESTIMATED

Fat around the organs, more closely tied to cardiometabolic risk than total fat. Estimated from body-shape ratios and body-fat %, calibrated to DXA. It is not a CT or MRI measurement.



Bars are relative to the strongest input for each sex. A dot means the input isn't used.

In women, waist dominates. In men, the model reads the contrast between stomach and waist: a belly that protrudes below the waist line pushes the estimate up.

Fat mass and lean mass

ESTIMATED

A direct split of body weight. No second model.

Fat mass = weight × body-fat %

Lean mass = weight minus fat mass (muscle, water, organs, bone)

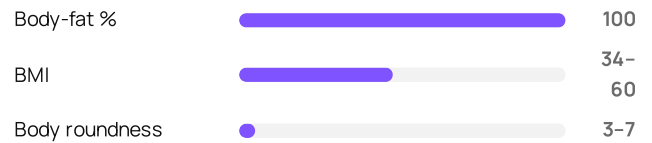
Both inherit the accuracy of body-fat %, and both depend on the weight entered that day. For weight-loss programs, lean mass is the number to watch: some lean loss is normal, and the outcome you want is fat falling much faster than lean mass.

Limb lean mass and skeletal muscle

ESTIMATED

Appendicular lean mass (arms and legs) is predicted from body-fat %, BMI and body roundness, trained on DXA.

Skeletal muscle mass is then a near-linear function of it.



Body roundness index (BRI) describes how round, rather than tall and narrow, the body is, using waist and height. Two people with the same BMI can have very different BRI.

Reported in kg, and as an index (mass ÷ height²) with a low, healthy or high category and an age and sex percentile. Muscle here is inferred from body shape and fat, not imaged directly.

Metabolic age

DERIVED

Body-fat % translated into an age: the average age of people in a ~20,000-person US population survey (NHANES) with similar body fat.

A communication device, not an independent biomarker. It makes adiposity easier for patients to relate to. The underlying signal is body-fat % and its percentile. The display is capped at 15 years either side of real age.

BMR and daily energy needs

DERIVED

Resting energy expenditure estimated from lean mass, then scaled to a daily total at a sedentary activity level.

Intentionally basic: a sensible starting point, not an indirect calorimetry result. Calorie recommendations never go below 1,200 kcal a day.

How accurate it is

Two questions matter clinically. Is the number close to the reference method (**accuracy**)? And does it give the same answer twice (**repeatability**)? For tracking a patient over time, repeatability matters most.

Waist circumference

vs a multi-camera 3D body scanner · n = 78

Trained tape measurer		±1.50%
Prism vs reference		±1.36%
Prism, scan to scan		±0.60%

As close to the reference as a trained tape measurer. On a 100 cm waist, repeat scans agree to within about 0.6 cm.

Body-fat %

vs DXA · n = 271

Prism vs DXA		±3.56 pts
DXA, scan to scan		±2.00 pts
Prism, scan to scan		±0.41 pts

On average within about 3.5 points of DXA, close enough to use the value in a consult. And repeat Prism scans agree far more closely than repeat DXA scans, so it's also very good at tracking change.

Visceral fat

vs DXA · n = 226

Prism vs DXA		±0.23 pts
DXA, scan to scan		±0.10 pts
Prism, scan to scan		±0.02 pts

Very stable from scan to scan, so a sustained change in direction is meaningful.

Limb lean mass

vs DXA · n = 185

Prism vs DXA		±1.61 pts
DXA, scan to scan		±0.40 pts
Prism, scan to scan		±0.20 pts

Good for direction of travel during weight loss. For a muscle-loss question that needs an exact value, DXA remains the reference.

Group figures, not guarantees

Accuracy is an average across a study population. An individual patient can sit further from DXA than the average.

The same on any phone

Results are consistent across current iPhone and Android devices, so patients don't need special hardware.

Every method has error

DXA, BIA and tape all disagree with each other. Pick one method per patient and track it, rather than comparing numbers across methods.

Where it works, where it fails

Every body composition method has blind spots. These are Prism's, with what you'll see in the results and what to do about it.

Works best for

Adults with overweight or obesity tracking change over a weight-management program. That's the population and use case the models were built and validated on.

Hardest for

Bodies far from the average shape: very muscular builds, very lean people, and people with low muscle at a normal weight. Their measurements (waist, hips, every circumference) stay accurate. It's the body composition estimates built from them that need more caution.

HOW THE SCAN WAS TAKEN



Loose or bulky clothing

The scan measures the outer outline. Fabric adds centimetres.

YOU'LL SEE

Body-fat % too high, lean mass too low.

DO

Ask for a rescan in minimal clothing or fitted gym wear.



Clothing type changes between scans

The most common trap. Patients often start in looser clothing and switch to fitted or minimal clothing later.

YOU'LL SEE

Body-fat % falling faster than real change, and lean mass that looks better preserved than it is.

DO

Agree the clothing type at baseline (minimal, or fitted). It doesn't need to be the same outfit. If the type changes, treat the next scan as a new baseline.



Weight not updated

Every mass value is a share of the weight entered.

YOU'LL SEE

Body composition that doesn't fit the change. If the patient lost weight but the old weight was entered, the scan sees the smaller body but splits the old total, so fat mass or lean mass reads too high, depending on how their body changed.

DO

Weigh on the same scale just before every scan.



One scan against the trend

Day-to-day differences are mostly noise.

YOU'LL SEE

A single jump or drop that the next scan doesn't confirm.

DO

Act on changes that hold across two or more scans.

THE PATIENT'S BODY



Very muscular builds

Large circumferences from muscle look like large circumferences from fat.

YOU'LL SEE

Body-fat % reads high.

DO

Measurements still hold. Lean on waist and the trend for body-fat %. Prism's Athlete Mode can be enabled for these patients.



Low muscle at a normal weight

Sometimes called "skinny fat". Shape changes little as muscle is lost.

YOU'LL SEE

Body-fat % can read low; circumferences barely move.

DO

A normal result doesn't rule out low muscle. Pair it with strength, function and history.



Very lean patients

Below roughly 15% body fat, body shape tells the models less.

YOU'LL SEE

Larger error relative to the value.

DO

Measurements still hold. Don't use small body-fat differences in this range to make decisions.



Not validated

Pregnancy, patients who can't stand unaided and turn, limb amputation, conditions that change limb shape (lipedema, significant edema).

YOU'LL SEE

Numbers that look normal but have no validation behind them.

DO

Use waist trends only, or another method.

WHAT EACH NUMBER IS, AND ISN'T

Benchmarked against DXA

Close to DXA on average. One patient can sit further from DXA than the average, so don't present it as a DXA result.

Future body predictions are motivational

Prism's "Future Me" shows an average weight-loss trajectory, not a forecast for this patient on this treatment.

Clinical scan protocol

The scan is a measurement procedure. How it's taken decides how good the numbers are. For clinical use, ask patients to scan the way they would prepare for any body measurement: in minimal clothing.

RECOMMENDED · CLINICAL STANDARD

Minimal clothing: fitted swimwear or underwear



- The scan sees the true body outline, with nothing adding volume
- Prism reads the body from the image, not only its outline. Visible skin gives the models the most detail to work with, and readings get more accurate as the models improve
- Frame it like changing into a gown before imaging: part of the procedure

ACCEPTABLE

Fitted gym wear



- Compression leggings or fitted shorts, fitted sports top
- For patients who prefer not to scan in minimal clothing
- Works well, as long as the patient stays in fitted gym wear every time



AVOID

Loose clothing hides the body

Fabric adds centimetres to every circumference, so body-fat % reads high and lean mass reads low.

× Hoodies and loose t-shirts

× Sweatpants or joggers

× Dresses or skirts

× Shoes (socks are fine)

× Hair covering the neck

Same type of clothing, every scan

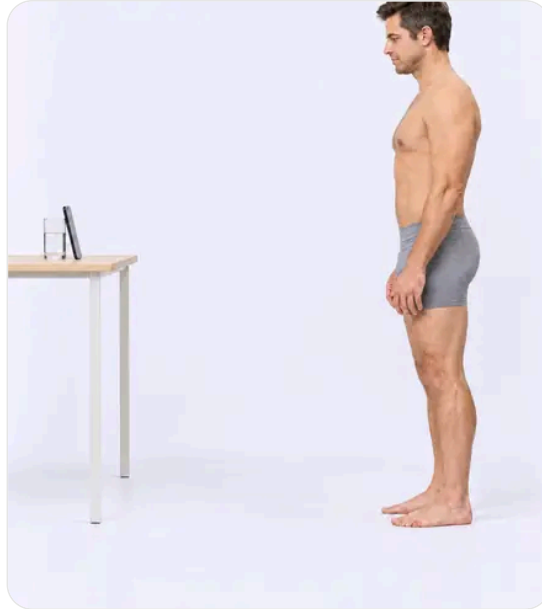
It doesn't need to be the exact same outfit. Switching between minimal and fitted clothing is a change in baseline.

Weigh first

Same scale, just before the scan. Weight feeds every mass value.

Same conditions

Same time of day, ideally in the morning before eating. Scan every one to two weeks.



1

Clear the space

Plain background, good even light, room to turn.

2

Prepare

Minimal or fitted clothing, no shoes, long hair up.

3

Place the phone

Upright at waist height, about 2 m away. A table and a glass to lean it on work fine.

4

Get in frame

The app guides position until the whole body is visible.

5

Pose and turn

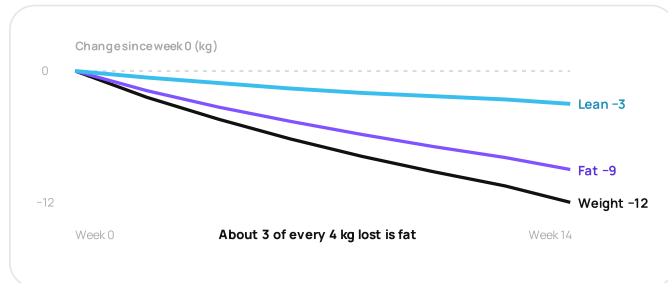
Arms slightly out (A-pose), one slow full turn.

READY-TO-USE PATIENT INSTRUCTIONS

"Your body scan is a measurement, like a blood pressure reading, so we want it taken the same way every time. Please scan in swimwear or fitted underwear if you're comfortable, or fitted gym wear if not, and stick with the same type of clothing each time. Weigh yourself just before you scan, ideally in the morning before breakfast. Each scan gives us a reading, and over the weeks we'll see how your numbers are changing."

Reading change over time

Each scan is a usable reading, and the series tells you even more. Some lean mass loss is normal during weight loss: what matters is that fat falls much faster than lean. Three illustrative patterns, with how to read each one. The data shown is illustrative, not from real patients.

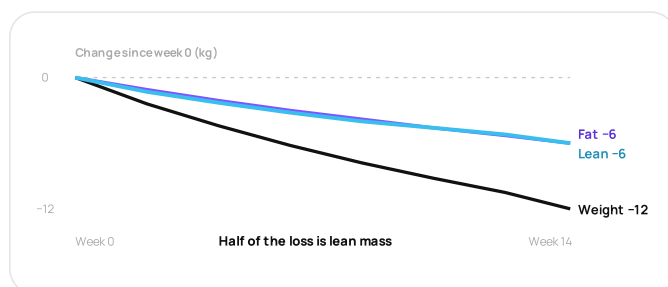


Weight down, mostly from fat

Everything goes down, which is normal. But fat falls about three times faster than lean mass, so body-fat % improves and waist follows weight down.

This is the outcome to reinforce. Some lean loss comes with any weight loss; the ratio is the sign of good-quality loss. Lean mass holding flat, or rising with resistance training, is even better but less common.

Healthy change



Weight down, lean falling as fast as fat

The same weight loss, but lean mass falls as fast as fat. Body-fat % barely improves, even though the scale looks great.

Worth a conversation about protein intake and resistance training, especially on rapid-loss treatment.

Watch lean mass



A step drop with steady weight

Body-fat % drops sharply between two scans while weight barely moves. Real fat loss doesn't look like a step.

Ask what the patient wore. If the clothing changed, treat the new scan as the new baseline.

Check the protocol

Practitioner FAQ

The questions patients and practitioners ask most, with answers you can use directly.

My patient's gym scale or InBody says their body fat is lower. Which is right?

Different methods give different numbers, and published studies show bioimpedance devices tend to read lower than DXA. Pick one method for this patient and stay with it. Every method has a precision range: repeat Prism scans agree within about half a point of body fat (± 0.41 in validation), against about ± 2 points for DXA and wider for BIA. So a change Prism shows is well above its own noise.

Why did body-fat % go up when weight went down?

Usually one of two things. Lean mass was lost faster than fat (see pattern 2 in Module 7), or the scan conditions changed: looser clothing, or weight not updated. Check the protocol first, then look at lean mass.

Can I use Prism to decide eligibility for treatment?

Prism measurements can inform your clinical assessment, the same way a tape-measured waist or a BIA reading would. Waist circumference is Prism's most accurate measure and is a reasonable input to a cardiometabolic risk assessment. The decision stays with the practitioner. Prism is not a diagnostic device.

How often should patients scan?

Every one to two weeks during active weight management, under the same conditions each time. More often adds little, because week-to-week change is small compared with noise.

Does the patient's phone matter?

No. Results are consistent across current iPhone and Android phones.

Why do you recommend minimal clothing?

The scan measures the outline of the body. Anything that adds volume, even fitted fabric, moves the outline away from the skin. Minimal clothing gives the truest outline and the most consistent one over time. Prism also reads the body from the image itself, so visible skin gives the models more to work with, and accuracy improves as the models do. Fitted gym wear is an acceptable alternative.

My patient is very muscular. Can I trust their result?

Their measurements, including waist, are as accurate as for anyone. Body-fat % tends to read high in muscular builds, so lean more on the trend for that one. Prism offers an Athlete Mode tuned for very lean and very muscular builds.

Does Prism show patients an image of their body?

Only if you choose to. The partner controls what patients see: numbers only, an anonymised avatar, or a textured 3D model. Many weight-management programs start with numbers only.

Evidence

Full validation figures and the peer-reviewed work behind them. The live, sortable dataset is at validation.prismlabs.tech (last validation run May 5, 2026).

Validation figures

METRIC	PRISM VS REFERENCE	REFERENCE METHOD'S OWN VARIATION	PRISM SCAN TO SCAN	N
Body-fat %	±3.56 pts vs DXA	DXA test-retest ±2.00 pts	±0.41 pts	271
Visceral fat	±0.23 pts vs DXA	DXA test-retest ±0.10 pts	±0.02 pts	226
Limb lean mass	±1.61 pts vs DXA	DXA test-retest ±0.40 pts	±0.20 pts	185
Waist	±1.36% vs 3D scanner	Trained tape measurer ±1.50%	±0.60%	78
Chest	±1.49% vs 3D scanner	Trained tape measurer ±1.50%	±0.57%	78
BMI	±2.82% vs 3D scanner	Self-reported BMI ±5.00%	±0.83%	78

Publications

YEAR	STUDY	WHERE	N	FINDING
2026	Body composition: a consistent, accurate alternative to DXA	White paper	273	Tracks DXA closely across body fat, visceral fat and limb lean mass
2024	Accurate metabolic disease-risk phenotyping	Obesity Science and Practice	44	Scan measurements highly correlated with a trained anthropometrist's tape
2024	Accuracy validation of Prism mobile scanning vs DXA	Frontiers in Medicine	131	Suitable as a rapid, accessible alternative to DXA
2024	Body composition via US Army method from 3D mobile scan	British Journal of Nutrition	96	Acceptable group-level performance
2024	Precision validation of Prism mobile scanning	European Journal of Clinical Nutrition	46	As precise as large multi-camera 3D scanners
2023	Precision and accuracy validation of Prism mobile scanning	White paper		Superior precision to other systems; good accuracy vs DXA
2023	Precision validation of single-camera non-rigid method	Clinical Nutrition Open Science	69	More precise than multi-camera 3D scanners
2020	Three commercial body scanners vs Prism Gen-1	European Journal of Clinical Nutrition	179	Precise anthropometric estimates across scanners
2019	Accuracy and precision of the Prism Gen-1 scanner	European Journal of Clinical Nutrition	90	Good correlation with tape and DXA, no significant bias

