



ARE ORAL BISPHOSPHONATES WORKING?

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FRACTURE FEST 2025



THE PROBLEM

Absorption

1-2% oral bisphosphonates
are absorbed, max 5%
Affected by food

Metabolism

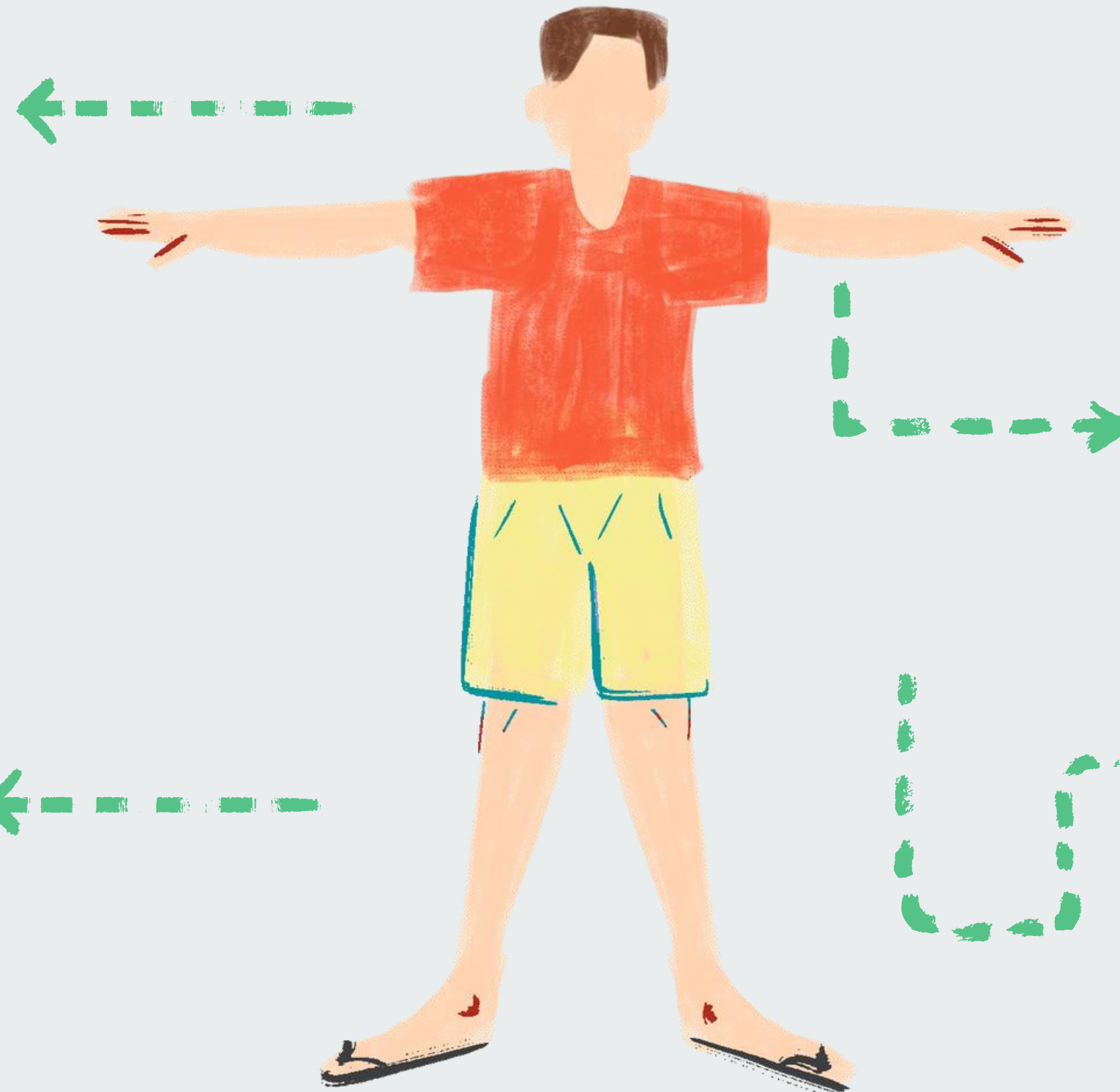
50% metabolised

Distribution

Not homogenous
Preference for high-turnover
bone

Excretion

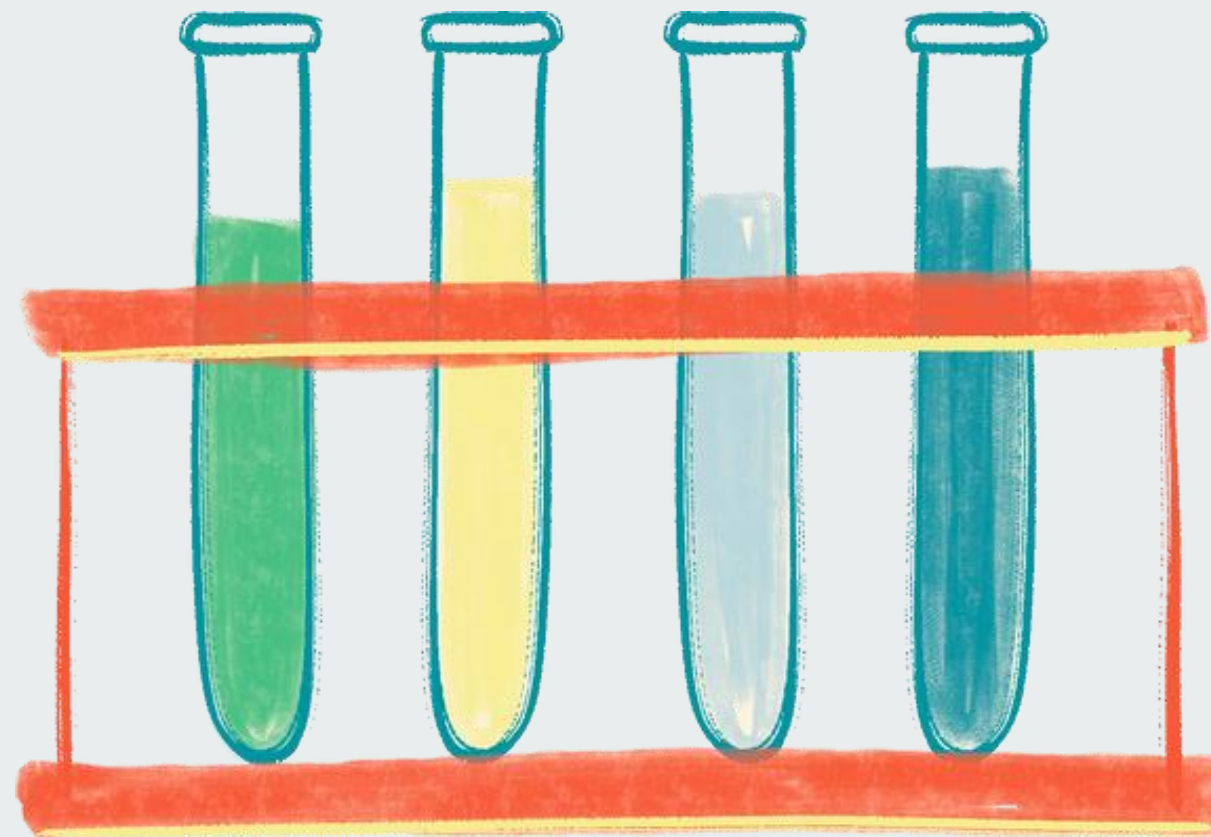
50% excreted unmetabolised



BONE TURNOVER MARKERS

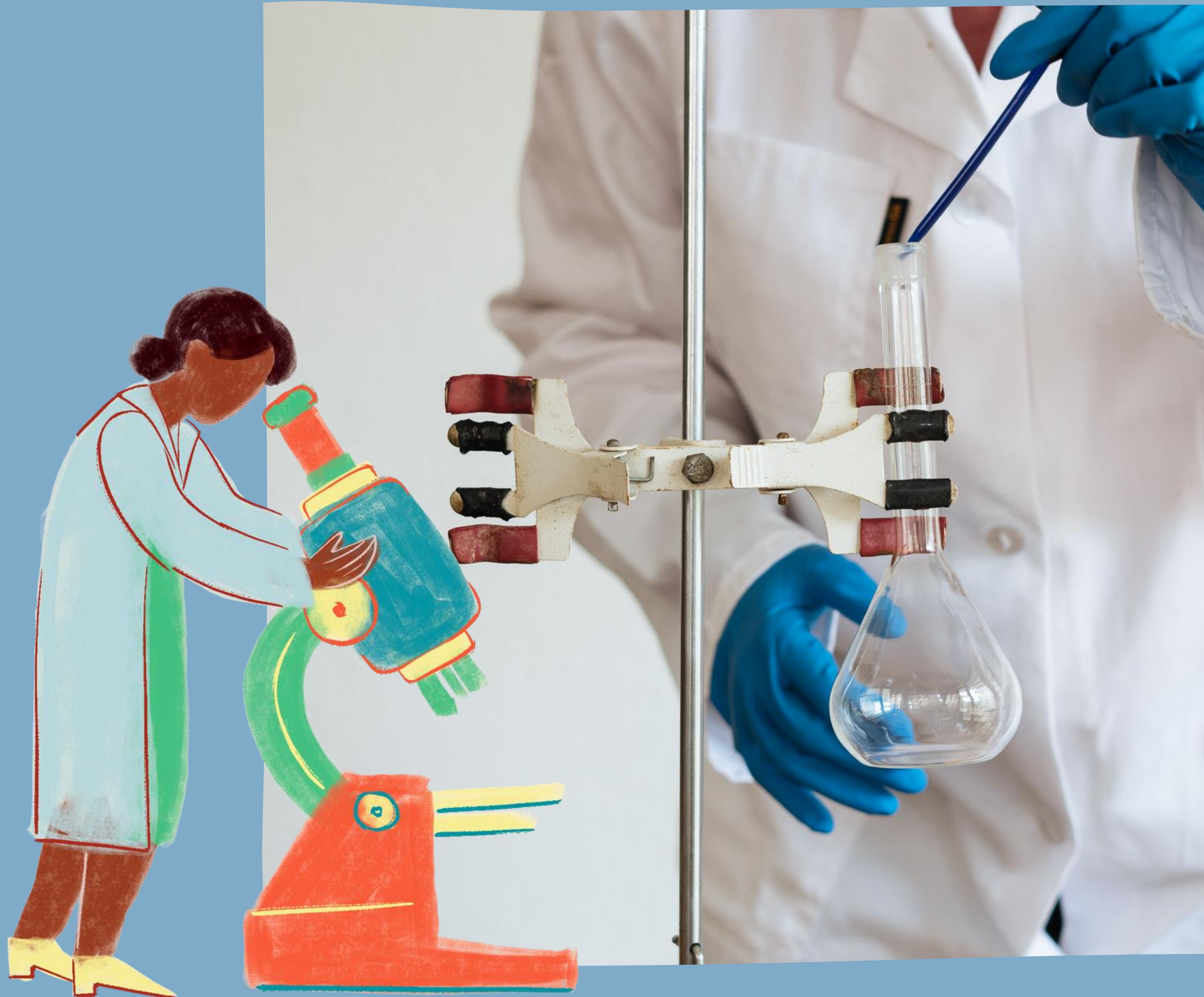
IOF-ESCEO-
IFCC supports
using BTM

P1NP checked
6 months
after starting
treatment



Changes in
BMD happen
over years

Tx within 12
weeks

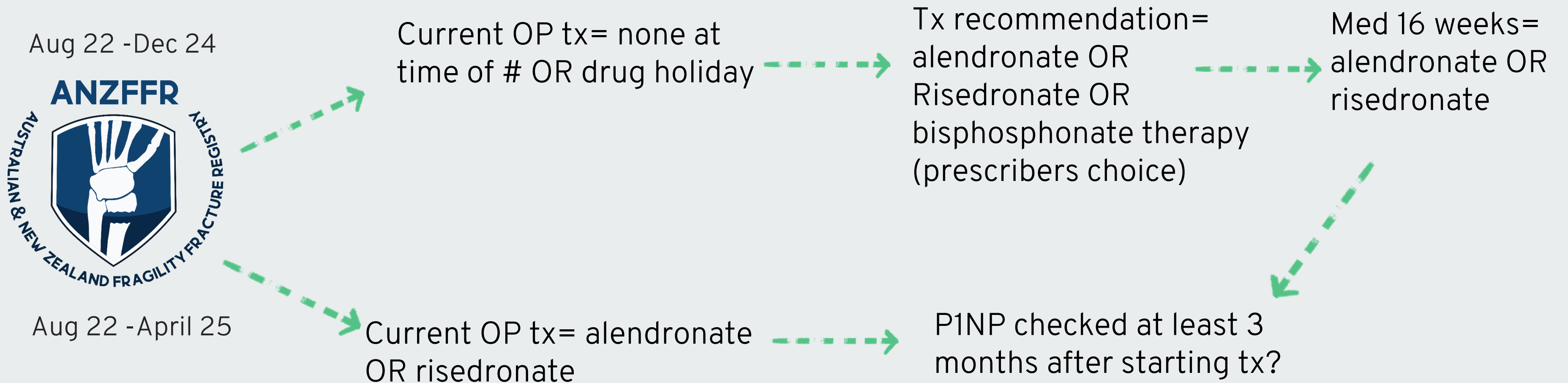


01

THE AUDIT

Is this a problem?

METHODS



RESULTS – TX INITIATED BY FLS



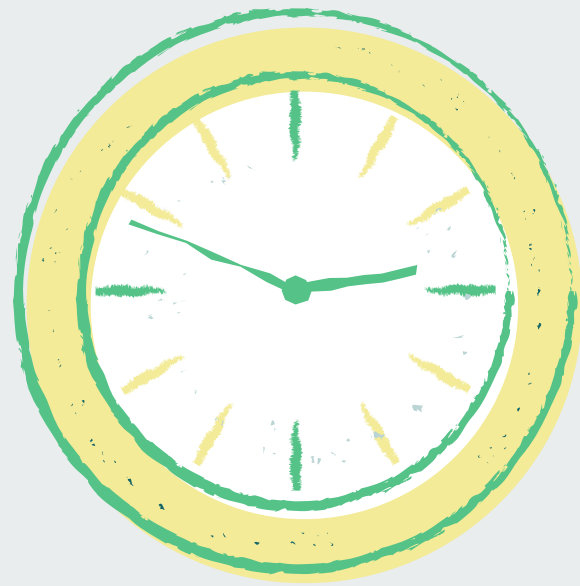
n	77	
Oral BP + P1NP checked	18	23%
<i>P1NP <35</i>	6	33%
<i>P1NP >35 + tx changed at 52 weeks</i>	2	17%

RESULTS – ALREADY ON TX



n	110	
Oral BP + P1NP not checked + tx changed	16	15%
Oral BP + P1NP checked	54	49%
<i>P1NP <35</i>	19	35%
<i>P1NP >35 + tx changed at 16 weeks</i>	24	69%

LEARNING POINTS



01

P1NP check

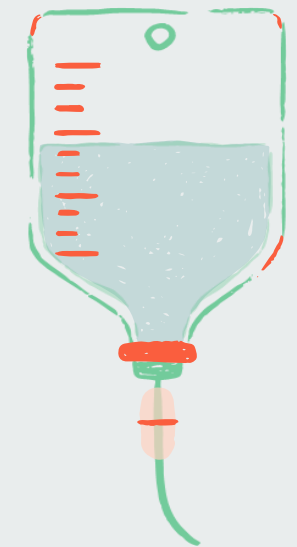
12-23% of patients started on oral bisphosphonates have a P1NP test 6 months after starting



02

Low suppression

33-35% of patients on oral bisphosphonates have a P1NP <35



03

Treatment changes

When we know P1NP isn't suppressed, tx has still not been altered



02

THE
PROJECT

PURPOSE

1. Increase P1NP ordered in patient started on oral bisphosphates
2. Increase switch to alternative treatment in patients who have a P1NP >35

AIM

IDEA

SUCCESS

Part of standard of care for anyone started on oral bisphosphonates

1. Long term treatment plans define dates for when to check P1NP
2. FLS ordering in patients started on tx by us
3. Calendar reminders for when to check
4. Education on denosumb as alternative

↑ n° of pts with P1NP checked after at least six months of oral bisphosphonate tx to 80% by September 2025

↑ n° of pts changed to alt. osteoporosis tx who have a P1NP >35 after at least six months of treatment of oral bisphosphonates to 80% by September 2025

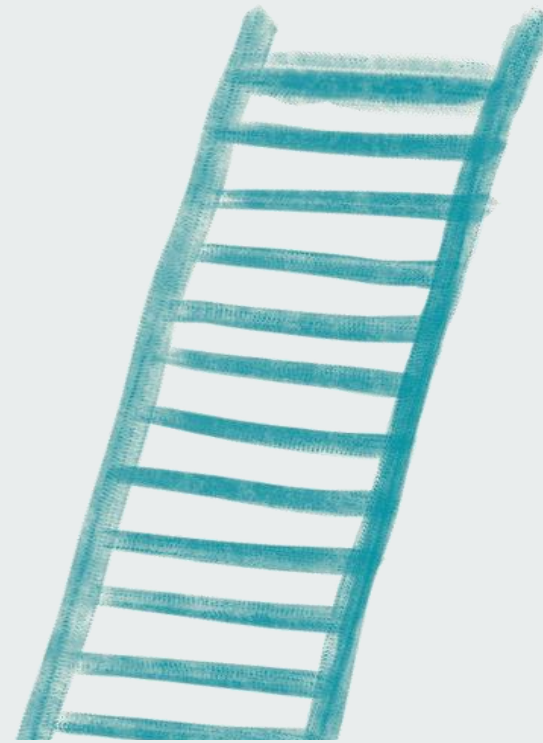


MEASUREMENTS



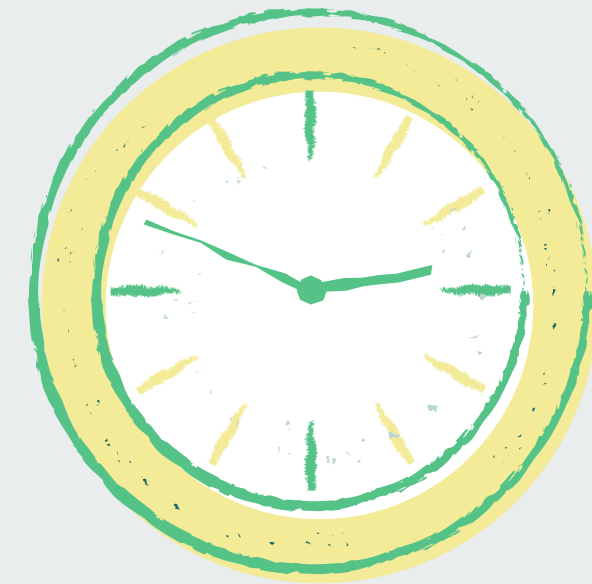
Outcome (aim)

- Number of P1NP's measured



Process (BTM)

- Number of P1NP's < 35
- Number of P1NP's > 35
therefore tx was changed



Balance (resources)

- Number of P1NP's measured
 - Cost of P1NP
 - FLS time

PROJECT TIMELINE



MY LAST THOUGHTS

1. Whose responsibility is it to check P1NP?
2. What capacity does FLS have for this?
3. Should we be pushing ZA, if so how do we overcome barriers
4. What role is there for oral bisphosphonates
5. Risk of treatment failure should be highlighted to patients

TAKE HOME MESSAGES

**POOR
ABSORPTION**

**TEST
P1NP**

**OFFER ALT
WHEN ABLE**

**ACCESS TO
ALT TX**



THANK YOU

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