



Exercise in Cancer

Flinders Medical Centre (FMC_SA)

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HRT 1721 'Allied Health Improvement Group'

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Adelaide



Key Problem

- FMC currently involved in an international multicentre trail
 - Colon Health and Life Long Exercise Change (“Challenge Trial”)
- Evidence demonstrates that patients who exercised were observed to have:
 - lower relative risk of cancer mortality
 - lower risk of recurrence
 - experienced fewer or less severe adverse effects (Cormie et al, 2017)
- Despite increasing evidence – no specific program available locally for public patients
- Physiotherapy lead pilot program was developed to determine viability and need

Aim of this innovation

- To provide patients undergoing treatment for cancer an evidence based exercise program.
- Goals:
 - Review the literature
 - Determine suite of outcome measures
 - Gain support from the Oncology Team at FMC
 - Conduct a feasibility study
 - Consider business change application if need expanded service
- Patient cohort
 - Patients undergoing cancer treatment at FMC
 - Prehabilitation (pre-oesophagectomy)

Baseline Data

- Other services contacted (interstate, privately)
- Consultation with Oncology Department
- Outcome measures determined:
 - Six Minute Walk Test (6MWT)
 - One rep max – leg press
 - Sit to Stand test – number of reps in 30 secs
 - BMI
 - Cancer Related Fatigue Questionnaire (FACIT-F, FACT-G)
- Referral form & patient information sheet developed

Key Changes Implemented

- Pilot 12 week program commenced August 2016
- Key points of program
 - Initial assessment (1:1 with PT)
 - Individually tailored exercise program, generally included
 - Aerobic 20 min
 - Strengthening – 30min
 - Stretching – 10 min
 - Twice weekly (x 1 hour) group sessions supervised by a PT
 - Max 8 participants per session
 - 6 and 12 week review
 - Discharge summary to oncologist on completion of program

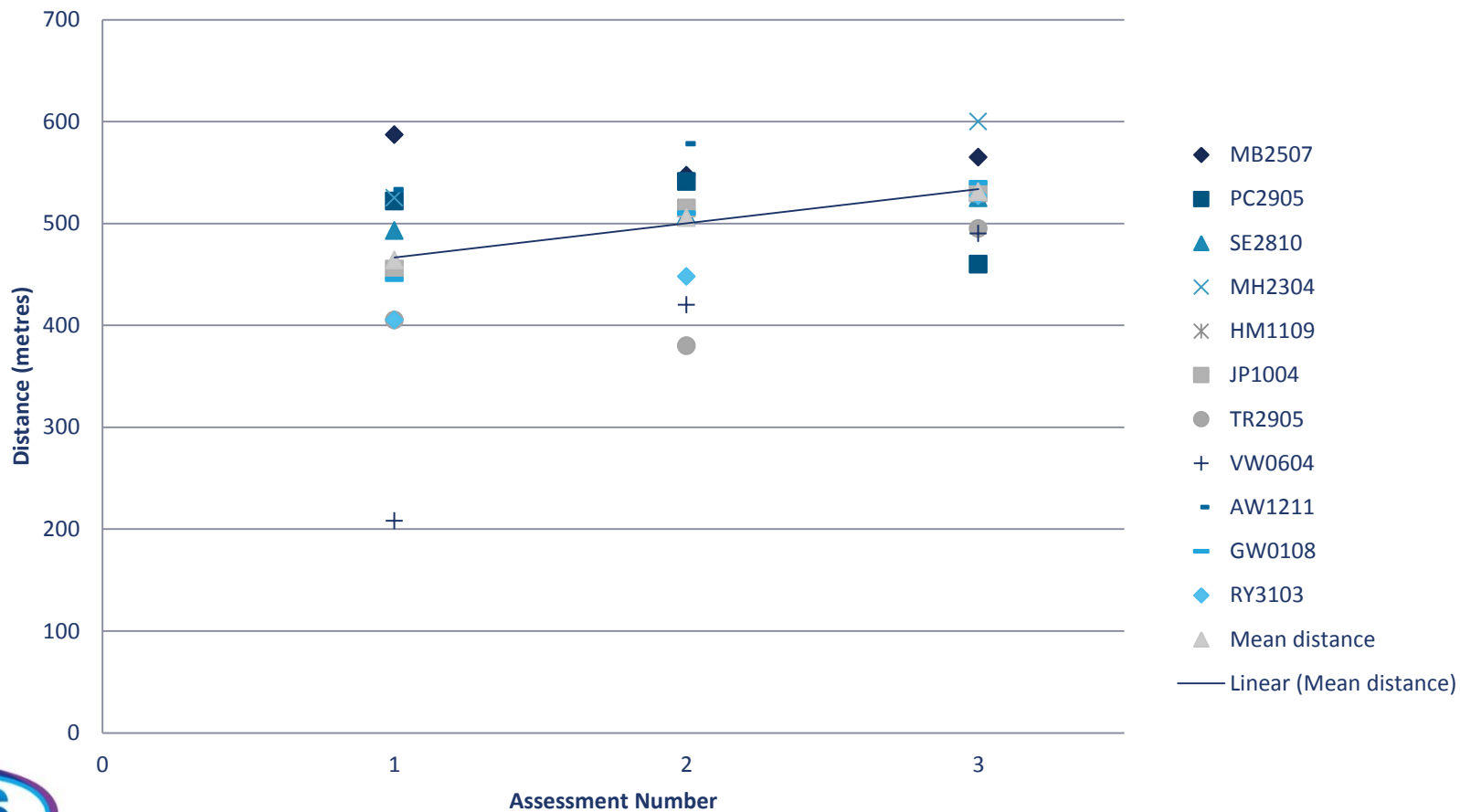
Outcomes so far

- 6 Minute Walk Test
 - Average distance increased by 22.7%
- Sit to Stand test
 - Average increase by 34%
- Leg Press (one rep max)
 - Average increase 134%
- Questionnaire
 - FACT-F – average change +8.9
 - FACT-G – average change +12

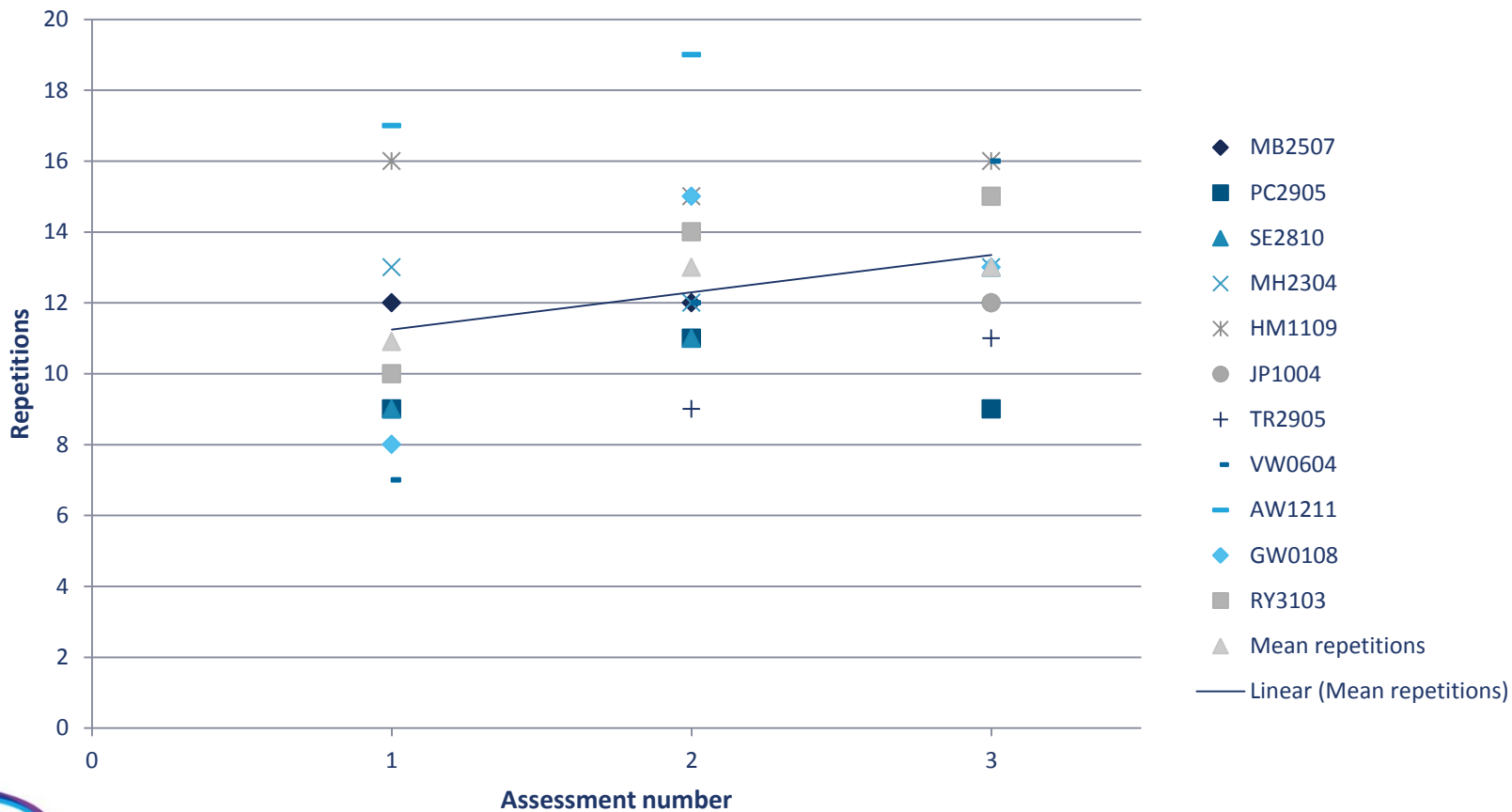
Qualitative Outcome

- Comments from patients
 - “the best thing I've done since starting chemo”
 - “I was so down before starting this”
 - “This exercise group has changed my life”
- Comment from haematologist
 - “my patient has done so well with this exercise class”

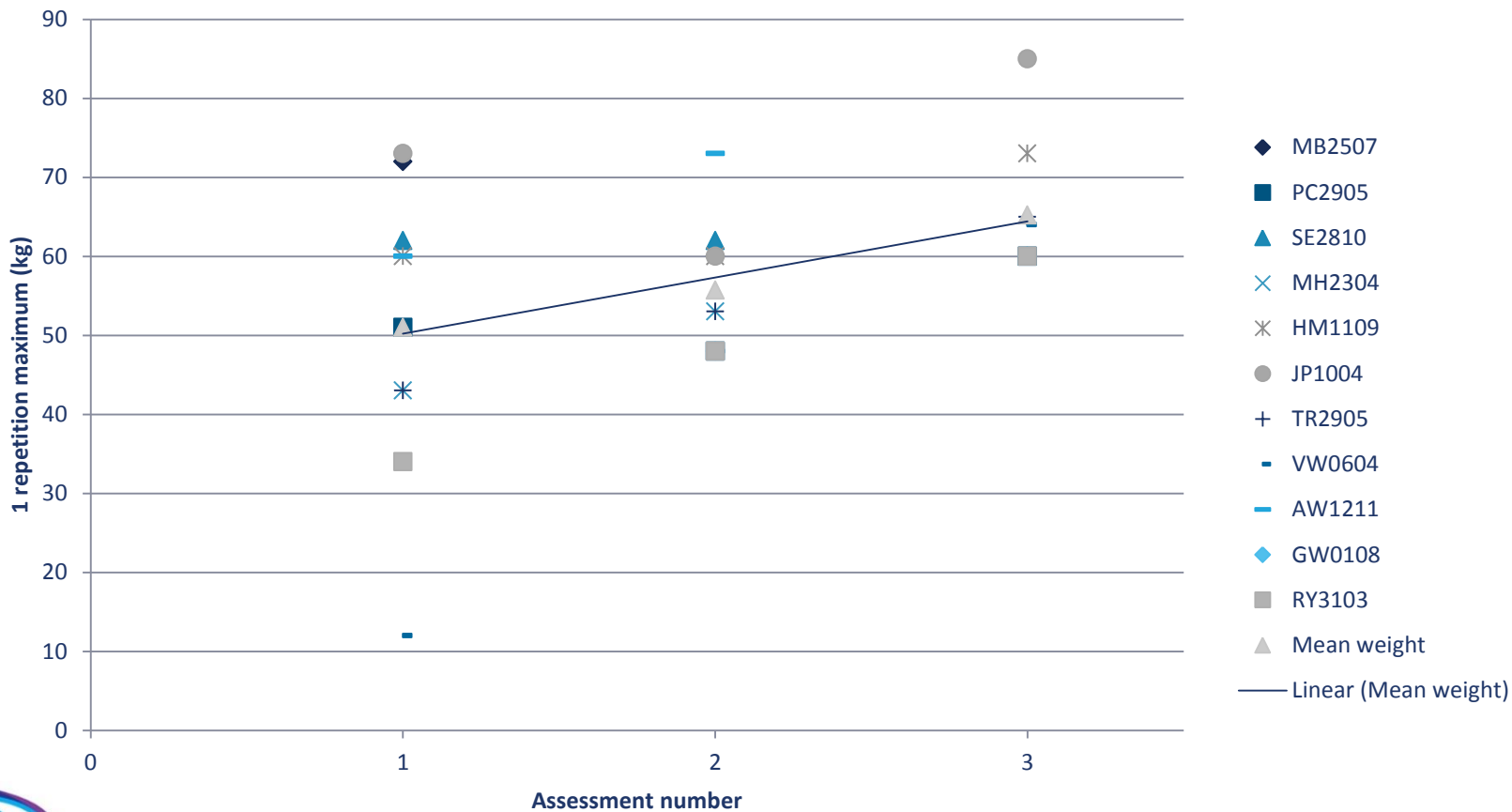
Six Minute Walk Test



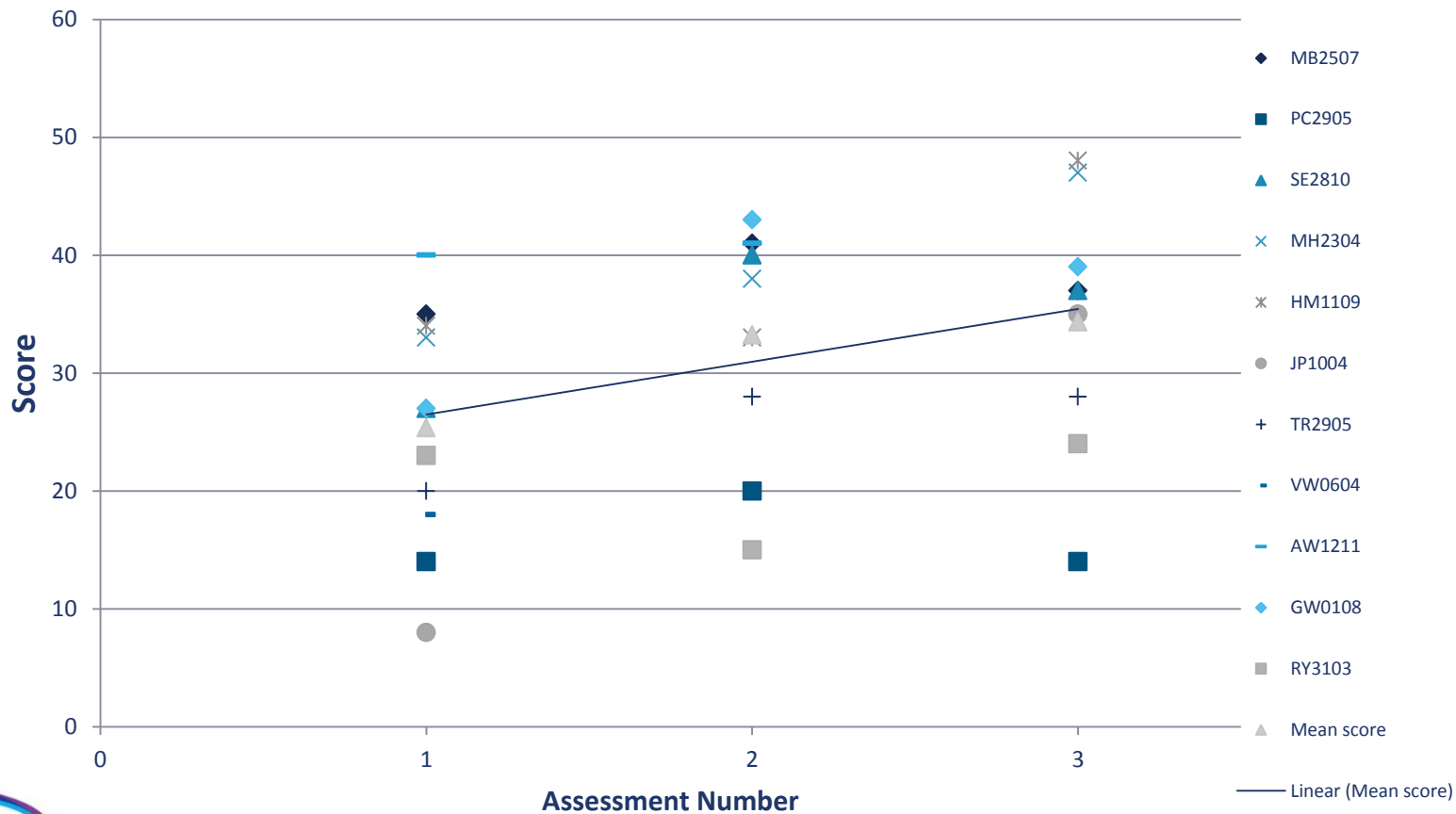
Sit to Stand - repetitions in 30 seconds



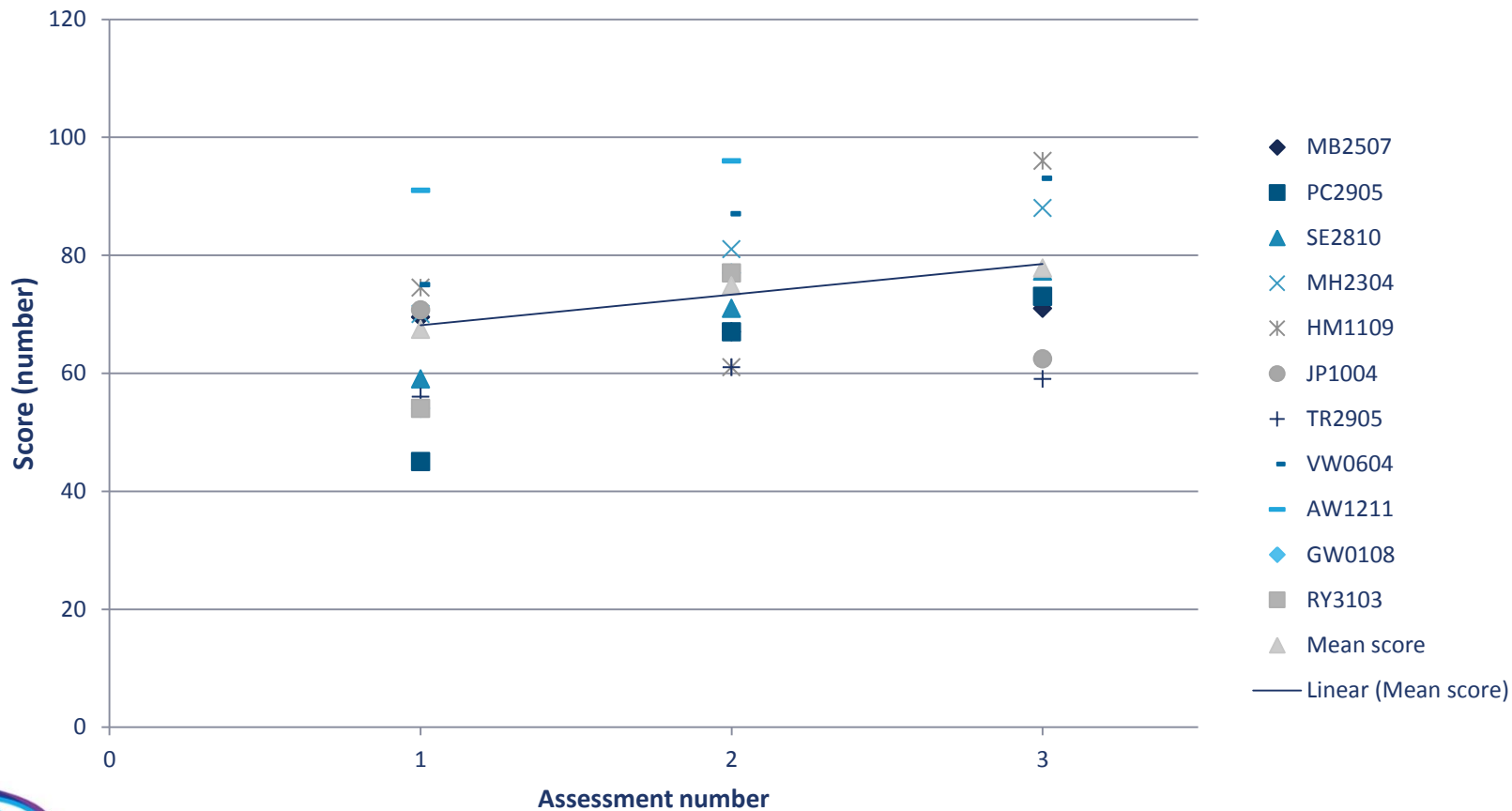
Leg press - 1 repetition max (kg)



FACIT-F Survey Results



FACT G Survey Scores



Lessons Learnt

- Exercise is a positive addition in the treatment of cancer
- Allied Health have a large role to play in this area
- Large numbers of medical teams need to be consulted (not just oncologists)
 - Haematologist, ENT etc
- Tweaked outcome measures
 - Initially we were using max leg press and max chest press and max bicep curl for outcome measures. They were hard to calculate and time consuming. Replaced by 30 second biceps curls - faster to administer
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