

Supplementary Table 1 Glossary of Terms*
Actin: a cellular protein found especially in microfilaments and active in muscular contraction, cellular movement, and maintenance of cell shape.
Arthroplasty: plastic surgery of a joint (as the hip or knee) : the operative formation or restoration of a joint.
Brace: an appliance for supporting a body part.
Carpometacarpal: relating to, situated between, or joining a carpus and metacarpus.
Case-control study: are studies in which patients who already have a specific condition are compared with people who do not have the condition.
Cast: A protective shell of fiberglass, plastic, or plaster, and bandage that is molded to protect broken or fractured limb(s) as it heals.
Cervical: relating to the cervical vertebrae (the bones in the neck).
Cohort studies: identify a group of patients who are already taking a particular treatment or have an exposure, follow them forward over time, and then compare their outcomes with a similar group that has not been affected by the treatment or exposure being studied.
Contracture: a permanent shortening (as of muscle, tendon, or scar tissue) producing deformity or distortion.
Controlled before-and-after study: a study in which observations are made before and after the implementation of an intervention, both in a group that receives the intervention and in a control group that does not.
Controlled clinical trial: a complex experiment including one or more control experiments or blank determinations along with the actual experimental tests.
Cross-over study: a crossover interchange in an experiment.
Dichotomous: divided into two parts.
Cyst: a growth filled with liquid that forms in or on your body.
Distal Interphalangeal: occurring or existing between phalanges of the hand or foot.
Filament: an elongated thin series of cells attached one to another or a very long thin cylindrical single cell.
Golgi tendon organ: a spindle-shaped sensory end organ within a tendon that provides information about muscle tension.
Heterogeneity: the quality or state of consisting of dissimilar or diverse elements.
Intervention: the act or fact or a means of interfering with the outcome or course especially of a condition or process (as to prevent harm or improve functioning).
Lumbar: of, relating to, or constituting the loins or the vertebrae between the thoracic vertebrae and sacrum.
Meta-analysis: quantitative statistical analysis of several separate but similar experiments or studies in order to test the pooled data for statistical significance.
Meta-regression: a technique for performing a regression analysis to assess the relationship between the treatment effects and the study characteristics of interest or factors concerning the execution of the study
Myosin: a fibrous protein that forms the contractile filaments of muscle cells and is also involved in motion in other types of cells.
Musculoskeletal system: is the combination of the muscular and skeletal systems working together and includes the bones, muscles, tendons and ligaments of the body.
Musculotendinous: of, relating to, or affecting muscular and tendinous tissue.

Neurologic: relating to the anatomy, functions, and organic disorders of nerves and the nervous system.
Orthosis: a device (such as a brace or splint) for supporting, immobilizing, or treating muscles, joints, or skeletal parts which are weak, ineffective, deformed, or injured.
Ossification: the natural process of bone formation, the hardening (as of muscular tissue) into a bony substance.
Osteoarthritis: degeneration of joint cartilage and the underlying bone, most common from middle age onward. It causes pain and stiffness, especially in the hip, knee, and thumb joints.
Parallel-group: compares two or more treatments. Participants are randomly assigned to either group, treatments are administered, and then the results are compared.
Pathognomonic: distinctively characteristic of a particular disease.
Placebo: a harmless pill, medicine, or procedure prescribed more for the psychological benefit to the patient than for any physiological effect.
Proximal interphalangeal joint: the synovial joints between the proximal and middle phalanges of the fingers and of the toes.
P-value: the probability of an event or outcome in a statistical experiment
Randomized controlled trial: a clinical trial in which the subjects are randomly distributed into groups which are either subjected to the experimental procedure (as use of a drug) or which serve as controls.
Range of motion: the extent of movement of a joint, measured in degrees of a circle.
Rheumatoid arthritis: a chronic progressive disease causing inflammation in the joints and resulting in painful deformity and immobility, especially in the fingers, wrists, feet, and ankles.
Systematic review: an extensive literature search on a clinical topic is conducted to identify studies with sound methodology. The studies are reviewed, assessed for quality, and the results summarized according to the predetermined criteria of the review question.
Zygapophyseal joint: located in the middle of the superior and inferior articular processes of adjacent vertebrae.
<i>*Adapted from Merriam-Webster, TheFreeDictionary.com and Duke University Medical Center Library and Archives</i>