

# Research on Prolotherapy success rates:

#### Knees

- Prolotherapy shows clinically meaningful, sustained improvements for knee
  osteoarthritis compared to both placebo and exercise, with reduction in pain and
  improvement in function. These benefits are evident even at 52 weeks post-treatment and
  appear to exceed the minimal clinically important difference for knee function and pain
  scores. (Sources: 1 2 3 4)
- 2. Some research suggests that prolotherapy may be as effective or even more effective than other common knee injections like hyaluronic acid, PRP, or steroids, especially for functional outcomes in osteoarthritis. (Sources: 5)
- 3. The majority of studies support its use for selected patients, with up to 82–96% reporting moderate to significant improvements in pain, walking ability, and overall life quality. (Sources: 3 5)

## **Shoulders**

- 1. Randomized controlled trials indicate that prolotherapy can significantly reduce pain and increase function in chronic shoulder conditions, including rotator cuff injuries and frozen shoulder. In most studies, prolotherapy was as effective as alternative injections (like corticosteroids or anesthetic) over several weeks to months. (Sources: 6 7 8 9)
- 2. Most patients (around 85–93%) report good or excellent outcomes after prolotherapy for chronic shoulder pain. (Sources: 7 9)

## Hips

- 1. Patients with chronic hip pain, often lasting over five years, achieved significant and lasting reductions in pain (average decrease from 7/10 to 2.4/10 on pain scales), with 89% experiencing at least 50% pain relief and most showing improved function and less reliance on pain medication. (Sources: 10 11 12 13)
- 2. Success rates of 70% or higher have been reported, particularly in those with less advanced arthritis. (Sources: 11)

#### Back

- 1. Evidence for prolotherapy in back pain (especially chronic low-back pain) is mixed and somewhat controversial. Systematic reviews and randomized trials indicate:
  - 1. As a stand-alone treatment, prolotherapy does not consistently outperform placebo for chronic low-back pain. (Sources: 14 15)
  - In combination with spinal manipulation, exercise, or other therapies, prolotherapy may offer benefit and some studies report higher rates of pain reduction (>50%) and improvements in disability when co-interventions are used. (Sources: 14 16 17.
  - 3. Overall, prolotherapy is viewed as potentially helpful within a broader rehabilitation program, but its isolated benefit for back pain is not well established.