

Traumeel® & Zeel® vs. Viscosupplements

Attributes	Traumeel® & Zeel® Injections	Viscosupplements
Osteoarthritis Indication	<ul style="list-style-type: none"> Type: Osteo and Rheumatoid. Large and small joints: knee, shoulder, hip, ankle, elbow, finger, etc. 	<ul style="list-style-type: none"> Type: Osteo only. Knee only.
MOA	<ul style="list-style-type: none"> Traumeel® is thought to inhibit IL-1β, TNF-α, and IL-8 to modulate inflammation. ⁽¹⁾ Zeel® injections modulate the production of LTB4 and PGE2⁽²⁾ and improve cartilage quality. ⁽³⁾ 	<ul style="list-style-type: none"> Exogenous viscoelastic substances are believed to act biomechanically by providing a cushioning effect. They are also believed to stimulate the patient's own proteoglycan synthesis. ⁽⁴⁾
Clinical Data	<ul style="list-style-type: none"> MOZArT showed statistically significant and clinically relevant relief of moderate to severe pain due to osteoarthritis of the knee. TAASS showed the non-inferiority of Traumeel® ointment to diclofenac gel 1%. 	<ul style="list-style-type: none"> Multiple studies have shown relief from mild to moderate OA knee pain in most patients.
Adverse effects	<ul style="list-style-type: none"> Rare allergic skin reactions. Redness or swelling at the site of injection. 	<ul style="list-style-type: none"> “Hot Knee”; pseudosepsis (prominent aseptic synovitis with heat and large-scale joint effusion). Stiffness, swelling, or puffiness at the site of injection. Not appropriate for patients with egg or poultry allergies.
Versatility	<ul style="list-style-type: none"> Thin needle makes injection easy. Instant relief, especially when combined with lidocaine. Commonly combined with PRP, Prolotherapy, and Stem Cells to reduce post-injection pain. Safe to inject near tendons. Safe for patients with cardiovascular risk and diabetics (no effect on blood glucose). Non-narcotic, non-addictive. No known drug interactions. 	<ul style="list-style-type: none"> Painful injection—viscosity necessitates a thick needle. Several days of initial discomfort common Safe for patients with cardiovascular risk and diabetics (no effect on blood glucose). Non-narcotic, non-addictive. No known drug interactions.
Insurance Coverage	<ul style="list-style-type: none"> Cash pay; office cost is \$9 per ampule. 	<ul style="list-style-type: none"> Declining insurance coverage. Expensive.
Dosage forms	<ul style="list-style-type: none"> Traumeel®: Injection, ointment, or tablet. Zeel®: Injection only. 	<ul style="list-style-type: none"> Injection only.
Other Indications	<ul style="list-style-type: none"> Multiple, including tendinopathy, sprains, epicondylitis, carpal tunnel, and trigger point. 	<ul style="list-style-type: none"> None.
Epidemiological Support	<ul style="list-style-type: none"> Safe: 70+ years of European experience with millions of patients. 	<ul style="list-style-type: none"> Safe: 30+ years of global experience with millions of patients.
Active ingredients	<ul style="list-style-type: none"> Traumeel®: 12 botanicals + 2 minerals. Zeel®: 5 botanicals + 5 minerals + 4 animal ingredients. 	<ul style="list-style-type: none"> Sodium hyaluronate.

The above statements have not been reviewed by the Food and Drug Administration. They are supported by traditional homeopathic principles.

(1) Porozov S, Cahalon L, Weiser M, Branski D, Lider O, Oberbaum M. Inhibition of IL-1 β and TNF- α secretion from resting and activated human immunocytes by the homeopathic medication Traumeel® S. Clin Dev Immunol. 2004;11(2):143-149; (2) Conforti et al Biomedical Ther. 1997; (3) Schmolz M, Biol Med 2000; (4) Altman RD, Manjoo, A., Fierlinger A, Niazi F., Nicholls M. The mechanism of action for hyaluronic acid treatment in the osteoarthritic knee BMC Musculoskeletal Disorders 2015 16:321