

Scientific References and Articles

Table of Contents - References

How to Guides

How to Choose the Best Platelet-Rich Plasma (PRP) Kit

1. Platelet-Rich Plasma [Abstract] – PMC – NCBI Search Results Items: 1 to 20 of 1973

How to Perform A Low-Cost Platelet-Rich Plasma Facelift

1. Safety, Efficacy, and Utility of Platelet-Rich Fibrin Matrix in Facial Plastic Surgery, *Arch Facial Plast Surg.* 2011;13(4):247-251. doi:10.1001/archfacial.2011.3

Topics

Why Doctors Are Now Ditching Steroid Injections for PRP

1. Anti-Inflammatory Therapeutics Market by Indication (Arthritis, Respiratory diseases, Multiple sclerosis, Psoriasis, Inflammatory bowel disease) and Drug Class (Anti-inflammatory Biologics, Non-Steroidal Anti-inflammatory drugs (NSAIDs), Corticosteroids) - Global Opportunity Analysis and Industry Forecast, 2014 – 2020, Allied Market Research Sept 2015
2. Study Questions Steroid Shots for Knee Arthritis, WebMD May 16, 2017
3. Common NSAID pain relievers not effective for back pain: Study, *Annals of the Rheumatic Disease*, Feb. 2, 2017
4. Differential cytotoxicity of corticosteroids on human mesenchymal stem cells. *Clin Orthop Relat Res.* 2015 Mar;473(3):1155-64.
5. Steroid Injections Increased Cartilage Loss in Knee Arthritis, *JAMA* May 16, 2017
6. Steroid-induced Osteoporosis, *Aging Health.* 2012;8(5):471-477.
7. Is There an Association Between the Use of Different Types of Nonsteroidal Antiinflammatory Drugs and Radiologic Progression of Osteoarthritis? The Rotterdam Study, *ARTHRITIS & RHEUMATISM* Vol. 52, No. 10, October 2005, pp 3137–3142 DOI 10.1002/art.21357
8. Effect of non-steroidal anti-inflammatory drugs on the human small intestine. *Drugs.* 1986;32 Suppl 1:35-41.
9. Neurological adverse events in patients receiving anti-TNF therapy: a prospective imaging and electrophysiological study, *Arthritis Research & Therapy* 2014, 16:R125 <http://arthritis-research.com/content/16/3/R125>
10. Interleukin-6, a Major Cytokine in the Central Nervous System, *International Journal of Biological Sciences* 2012; 8(9):1254-1266. doi: 10.7150/ijbs.4679
11. Steroid vs. Platelet-Rich Plasma in Ultrasound-Guided Sacroiliac Joint Injection for Chronic Low Back Pain, *Pain Practice/Volume 17, Issue 6, 27 September 2016*
12. Platelet-rich plasma versus corticosteroid injection for recalcitrant lateral epicondylitis: clinical and ultrasonographic evaluation, *Journal of Orthopaedic Surgery* 2015;23(1):1-5
13. Autologous Platelet-rich Plasma versus Corticosteroid in the Management of Elbow Epicondylitis: A Randomized Study, *International Journal of Applied and Basic Med Research*, 2017 Apr-Jun; 7(2): 125–128.

14. Plantar Fasciitis—A Comparison of Treatment with Intralesional Steroids versus Platelet-Rich Plasma A Randomized, Blinded Study, Journal of the American Podiatric Medical Association, Vol 107 No 6, November/December 2017
15. Comparison of platelet-rich plasma and steroid injection in the treatment of plantar fasciitis, Acta Orthop Traumatol Turc 2014;48(6):667-672
16. Platelet-rich plasma efficacy versus corticosteroid injection treatment for chronic severe plantar fasciitis. Foot Ankle Int. 2014 Apr;35(4):313-8
17. A systematic review and meta-analysis of platelet-rich plasma versus corticosteroid injections for plantar fasciopathy, International Orthopaedics volume 41, pages1169–1181(2017)
18. The temporal effect of platelet-rich plasma on pain and physical function in the treatment of knee osteoarthritis: systematic review and meta-analysis of randomized controlled trials, Journal of Orthopaedic Surgery and Research (2017) 12:16
19. Efficacy of Platelet-Rich Plasma in the Treatment of Knee Osteoarthritis: A Meta-analysis of Randomized Controlled Trials. Arthroscopy. 2017 Mar;33(3):659-670.e1
20. The effect of subacromial injections of autologous conditioned plasma versus cortisone for the treatment of symptomatic partial rotator cuff tears, Knee Surgery, Sports Traumatology, Arthroscopy volume 24, pages3787–3792(2016)
21. Platelet-rich plasma versus steroid injection for subacromial impingement syndrome, Journal of Orthopaedic Surgery 2016;24(1):62-6

Stem Cell Platelet-Rich Plasma: The Best Regenerative Therapy?

1. Adipose tissue-derived mesenchymal stem cells and platelet-rich plasma: stem cell transplantation methods that enhance stemness, Stem Cell Research & Therapy (2015) 6:215
2. Activated platelet-rich plasma improves adipose-derived stem cell transplantation efficiency in injured articular cartilage, Stem Cell Research & Therapy 2013, 4:91
3. Human AB Serum and Thrombin-Activated Platelet-Rich Plasma Are Suitable Alternative to Fetal Calf Serum for the Expansion of Mesenchymal Stem Cells from Adipose Tissue, Stem Cells 2007; 25:1270-1278

Six Reasons to Offer Your Patients Platelet-Rich Plasma

1. Effect of platelet-rich plasma on healing tissues in acute ruptured Achilles tendon: a human immunohistochemistry study, Published Online February 26, 2015 Poster 48 University of Liverpool, Liverpool, UK (J Alsousou DPhil); University of Oxford, Oxford, UK (M Thompson PhD, Prof K Willett FRCS, S Franklin PhD); and University of Birmingham, Birmingham, UK (P Harrison PhD)
2. Efficacy of Platelet-Rich Plasma in the Treatment of Knee Osteoarthritis: A Meta-analysis of Randomized Controlled Trial, Arthroscopy Journal, Volume 33, Issue 3, Pages 659-670.e1, March 2017
3. Treatment of chronic non-healing ulcers using autologous platelet rich plasma: a case series, Journal of Biomedical Science (2017) 24:16

4. Intradiscal PRP injections may reduce discogenic low back pain, *Int Orthop*. 2017;doi:10.1007/s00264-016-3178-3.
5. Platelet Rich Plasma PRP [25 Search Results], *Chinese Medical Journal*, May 4, 2020
6. The Effectiveness of Platelet-Rich Plasma in the Treatment of Tendinopathy: A Meta-analysis of Randomized Controlled Clinical Trials. *Am J Sports Med*. 2017 Jan;45(1):226-233
7. Effectiveness of platelet-rich plasma Injection for rotator cuff tendinopathy: a prospective Open-label study 对肩袖肌腱病 (RCT) 进行富含血小板血浆注射的有效性：预期的开放标签研究 Eficacia de la inyección de plasma rico en plaquetas para la tendinopatía del manguito de los rotadores: estudio abierto prospectivo, *GLOBAL ADVANCES IN HEALTH AND MEDICINE*, Volume 2, Number 2 • March 2013
8. A retrospective comparison of the management of recalcitrant lateral elbow tendinosis: platelet-rich plasma injections versus surgery, *Hand (N Y)*. 2015 Jun;10(2):285-91.
9. Platelet-rich plasma injections for the treatment of hamstring injuries: a randomized controlled trial. *Am J Sports Med*. 2014 Oct;42(10):2410-8.
10. Efficacy of platelet-rich plasma injections in osteoarthritis of the knee: a systematic review and meta-analysis, *Br J Sports Med* 2015;49:657–672.
11. Lumbar Intradiskal Platelet-Rich Plasma (PRP) Injections: A Prospective, Double-Blind, Randomized Controlled Study, *PM&R/Volume 8, Issue 1, 24 August 2015*
12. Effects of Local Administration of Platelet Rich Plasma on Functional Recovery after Bridging Sciatic Nerve Defect Using Silicone Rubber Chamber; An Experimental Study, *Bull Emerg Trauma* 2015;3(1):1-7
13. Use of Platelet Rich Plasma Gel on Wound Healing: A Systematic Review and Meta-Analysis, *Open Access Journal of Plastic Surgery*, Sept 15, 2011
14. Comparison between Conventional Mechanical Fixation and Use of Autologous Platelet Rich Plasma (PRP) in Wound Beds Prior to Resurfacing with Split Thickness Skin Graft, *World J Plast Surg* 2015;4(1):50-59.
15. [ClinicalTrials.gov](https://clinicaltrials.gov), 123 Studies found for: Recruiting, Active, not recruiting, Enrolling by invitation Studies | Platelet-Rich
16. Intra-articular Hyaluronic Acid (HA) and Platelet Rich Plasma (PRP) injection versus Hyaluronic acid (HA) injection alone in Patients with Grade III and IV KneeO steoarthritis (OA): A Retrospective Study on Functional Outcome, *Malaysian Orthopaedic Journal* 2016 Vol 10 No 2
17. Lumbar Intradiskal Platelet-Rich Plasma (PRP) Injections: A Prospective, Double-Blind, Randomized Controlled Study, *PM R* (2018) 1-10
18. Platelet-rich plasma injections for the treatment of hamstring injuries: a randomized controlled trial. *Am J Sports Med*. 2014 Oct;42(10):2410-8.

Six Ways Platelet-Rich Plasma Saves Your Patients Money

1. Clinical and economic effectiveness of the use of platelet-rich plasma in the treatment of chronic wounds. *Wound Medicine* Volume 19, December 2017, Pages 27-32

2. Intra-articular Autologous Conditioned Plasma Injections Provide Safe and Efficacious Treatment for Knee Osteoarthritis: An FDA-Sanctioned, Randomized, Double-blind, Placebo-controlled Clinical Trial. *Am J Sports Med.* 2016 Apr;44(4):884-91
3. Efficacy of Platelet-Rich Plasma in the Treatment of Knee Osteoarthritis: A Meta-analysis of Randomized Controlled Trials. *Arthroscopy Association of North America*, March 2017 Volume 33, Issue 3, Pages 659–670.e1
4. Hospital quality and the cost of inpatient surgery in the United States. *Ann Surg* . 2012 January ; 255(1): 1–5.
5. The Costs Associated With Adverse Drug Events Among Older Adults in the Ambulatory Setting. *Medical Care*, December 2005 - Volume 43 - Issue 12.
6. The Use of Platelet-Rich Plasma in Orthopaedic Injuries. J. F. S. D. Lana et al. (eds.), *Platelet-Rich Plasma, Lecture Notes in Bioengineering*, DOI: 10.1007/978-3-642-40117-6_16, Springer-Verlag Berlin Heidelberg 2014.

Three PRP Treatments That Are Revolutionizing Skincare

1. Daniel Sister describes a study combining the use of platelet rich plasma, hyaluronic acid, and succinic acid for skin rejuvenation. *PRIME Journal*.
2. Combined treatment with fractional carbon dioxide laser, autologous platelet-rich plasma, and narrow band ultraviolet B for vitiligo in different body sites: A prospective, randomized comparative trial. *J Cosmet Dermatol.* 2018 Jun;17(3):365-372.
3. Platelet-Rich Plasma (PRP) Injections. *RealSelf*. April 16, 2020.
4. Platelet-rich plasma—an ‘Elixir’ for treatment of alopecia: personal experience on 117 patients with review of literature. *Stem Cell Investig* 2017;4:64.

Reversing Menopause with PRP Injections

1. Inovium Ovarian Rejuvenation Trials. *ClinicalTrials.gov* Identifier: NCT03178695. First Posted: June 7, 2017 Last Update Posted: April 20, 2020
2. Platelet-Rich plasma – an ‘Elixir’ for treatment of alopecia: personal experience on 117 patients with review of literature. *Stem Cell Investigation*. *Stem Cell Investig* 2017;4:64
3. The effect of platelet-rich plasma on reducing blood loss after total knee arthroplasty A systematic review and meta-analysis. *Medicine* (2017) 96:26
4. Platelet-rich plasma versus autologous blood versus steroid injection in lateral epicondylitis: systematic review and network meta-analysis. *J Orthopaed Traumatol* (2016) 17:101–112
5. Platelet-rich plasma: why intra-articular? A systematic review of preclinical studies and clinical evidence on PRP for joint degeneration. *Knee Surg Sports Traumatol Arthrosc* (2015) 23:2459–2474
6. Efficacy of Platelet-Rich Plasma in Retarding Intervertebral Disc Degeneration: A Meta-Analysis of Animal Studies. *BioMed Research International* Volume 2017, Article ID 7919201, 10 pages
7. Effects of Platelet Rich Plasma on Healing Rate of Long Bone Nonunion Fractures: A Randomized Double-Blind Placebo Controlled Clinical Trial. *Bull Emerg Trauma* 2016;4(3):134-140.

8. Menopause reversal restores periods and produces fertile egg. *New Scientist*. 20 July 2016.
9. Bone Marrow Transplantation Generates Immature Oocytes and Rescues Long-Term Fertility in a Preclinical Mouse Model of Chemotherapy-Induced Premature Ovarian Failure. *Journal of Clinical Oncology: An American Society of Clinical Oncology Journal*. Volume 25, Issue 22. 2006.
10. Autologous platelet-rich plasma promotes endometrial growth and improves pregnancy outcome during in vitro fertilization. *Int J Clin Exp Med* 2015;8(1):1286-1290.
11. IVF - Genesis Athens, Papanikoli 14-16, Chalandri, Athens Greece, ΓΕΝΕΣΙΣ ΑΘΗΝΩΝ, 2013.
12. Konstantinos Pantos. Genesis Athens Clinic, 14-16 Papanicoli street, Chalandri, Athens 152 32 Greece. ΓΕΝΕΣΙΣ ΑΘΗΝΩΝ, 2013.
13. Ovarian Rejuvenation | Advanced Fertility Services, 1625 Third Avenue New York, NY 10128. 2016.
14. Center for Advanced Genetics at G5F. 3420 Carmel Mountain Road, Suite 200 San Diego, California 92121 USA.
15. Platelet-rich Plasma (PRP) for Endometrial Regeneration and Repair (PRP-E). *ClinicalTrials.gov*. First Posted, July 7, 2016. Last Update Posted, March 27, 2019.

How Platelet-Rich Plasma Is Changing Arthritis Treatments

1. "I'll never go through shoulder surgery again, so here's what I did". *The Washington Post*. July 4, 2016.
2. Implicit hype? Representations of platelet rich plasma in the news media. August 9, 2017. *PLoS ONE* 12(8): e0182496.
3. Does Intra-articular Platelet-Rich Plasma Injection Provide Clinically Superior Outcomes Compared With Other Therapies in the Treatment of Knee Osteoarthritis? A Systematic Review of Overlapping Meta-analyses. *Arthroscopy: The Journal of Arthroscopic & Related Surgery* Volume 31, Issue 11, November 2015, Pages 2213-2221.
4. Efficacy of Platelet-Rich Plasma in the Treatment of Knee Osteoarthritis: A Meta-analysis of Randomized Controlled Trials. March 2017 Volume 33, Issue 3, Pages 659-670.e.1, *Arthroscopy Association of North America*.
5. "Stem Cells in Sports Medicine: Ready for Prime Time?" *Medscape*. July 12, 2017.
6. "FDA Clears Iovora Cold Treatment Device for Knee OA Pain." *Medscape*. May 18, 2017.
7. Platelet Rich Plasma for Knee Osteoarthritis: When it works & When it will not work. *Caring Medical*. 2020.
8. "Running Doc on using Platelet Rich Plasma (PRP) to treat osteoarthritis." *NEW YORK DAILY NEWS* | AUG 01, 2017.
9. "Rebuilding And Regenerating Damaged Knees: The Future Has Arrived!" *HuffPost*. Apr 24, 2017.

5 Ways Platelet-Rich Plasma Is Relieving Pain in America

1. Effectiveness of platelet-rich plasma in the treatment of moderate knee osteoarthritis: a randomized prospective study. *J. Phys. Ther. Sci.* 27: 3863–3867, 2015.

2. Sensory improvement of leprosy peripheral neuropathy in patients treated with perineural injection of platelet-rich plasma. *Int J Dermatol.* 2014 Jan;53(1):109-13..
3. Single injection of platelet-rich plasma as a novel treatment of carpal tunnel syndrome. *Neural Regen Res.* 2015 Nov; 10(11): 1856–1859.
4. Platelet-rich plasma and the elimination of neuropathic pain. *Mol Neurobiol.* 2013 Oct;48(2):315-32.
5. Platelet-Rich Plasma (PRP) Therapy Offers Pain Relief for Low Back Pain. Regenerative SportsCare Institute. New York City. April 5, 2017.
6. A New Technique for the Treatment of Lumbar Facet Joint Syndrome Using Intra-articular Injection with Autologous Platelet Rich Plasma. *Pain Physician* 2016; 19:617-625.
7. Intradiscal Injection of Autologous Platelet-Rich Plasma Release to Treat Discogenic Low Back Pain: A Preliminary Clinical Trial. *Asian Spine J* 2017; 11(3):380-389.

Is Amniotic Fluid A Ready-Made Alternative to Platelet-Rich Plasma?

1. Amniotic fluid stem cells provide considerable advantages in epidermal regeneration: B7H4 creates a moderate inflammation microenvironment to promote wound repair. *Scientific Reports* | 5:11560.
2. “Amniotic stem cells demonstrate healing potential” Rice University, April 8, 2015.

The Beauty of Platelet-Rich Plasma for Dry Eyes

1. Symptomatic dry eye treatment with autologous platelet-rich plasma. *Ophthalmic Res.* 2007;39(3):124-9. Epub 2007 Mar 19.
2. How (and Why) to Make Autologous Serum. If conventional therapy isn't up to scratch for severe dry eye, consider autologous serum. It may be easier and more effective than you think. *Review of Optometry*, March 15, 2012.
3. “Platelet-rich plasma successfully treats dry eye.” *Primary Care Optometry News*, December/January 2012.
4. Autologous Platelet-rich Plasma Eye Drops in the Treatment of Recurrent Corneal Erosions. *Korean J Ophthalmol* 2016;30(2):101-107.
5. A Review of Autologous Serum Autologous serum drops may be used to treat significant dry eye, RCE and neurotrophic keratitis. *Review of Optometry*, October 15, 2011.

Platelet-Rich Plasma for Bone-Healing: Myth or Fact?

1. Clinical effectiveness of autologous platelet-rich plasma and Peptide-enhanced bone graft in the treatment of intrabony defects. *J Periodontol.* 2009 Jan;80(1):62-71.
2. Evaluation of the relative efficacy of autologous platelet-rich plasma in combination with β -tricalcium phosphate alloplast versus an alloplast alone in the treatment of human periodontal intrabony defects: A clinical and radiological study. *Indian Journal of Dental Research.* Year : 2011, Volume : 22, Issue : 1, Page : 107-115.
3. The use of autologous concentrated growth factors to promote syndesmosis fusion in the Agility total ankle replacement. A preliminary study. *Foot Ankle Int.* 2005 Oct;26(10):840-6.

4. Platelet-rich plasma: Growth factor enhancement for bone grafts. *Oral Surgery Oral Medicine Oral Pathology Oral Radiology*. June 1988, Volume 85, Issue 6, Pages 638-646.
5. Platelets stimulate proliferation of bone cells: involvement of platelet-derived growth factor, microparticles and membranes. *Clin Oral Implants Res*. 2002 Oct;13(5):529-35.
6. PRP as a New Approach to Prevent Infection: Preparation and In vitro Antimicrobial Properties of PRP. *J. Vis. Exp.* (74), e50351, doi:10.3791/50351 (2013).

Is Platelet-Rich Plasma Injection Covered by Medicare? Why Not?

1. Clay Buchholz out several weeks after PRP injection to elbow. ESPN. Wednesday, July 22, 2015.
2. Overkill: An avalanche of unnecessary medical care is harming patients physically and financially. What can we do about it? America's Epidemic of Unnecessary Care | The New Yorker. Atul Gawande May 4, 2015.

Unfortunately, Cortisone Doesn't Work; PRP Injections Do

1. Platelet-rich plasma efficacy versus corticosteroid injection treatment for chronic severe plantar fasciitis. *Foot Ankle Int*. 2014 Apr;35(4):313-8. doi: 10.1177/1071100713519778.
2. Pain and activity levels before and after platelet-rich plasma injection treatment of patellar tendinopathy: a prospective cohort study and the influence of previous treatments. *International Orthopaedics (SICOT)* (2012) 36:1941–1946.

Why More Women Seek PRP Treatments for Thinning Hair

1. "New Treatments for Thinning Hair for Women." *New York Times*. April 15, 2015.

Did Platelet-Rich Plasma Just Crush \$13 Billion Hyaluronic Acid?

1. Hyaluronic Acid Versus Platelet-Rich Plasma: A Prospective, DoubleBlind Randomized Controlled Trial Comparing Clinical Outcomes and Effects on Intra-articular Biology for the Treatment of Knee Osteoarthritis. *Am J Sports Med*. 2017 Feb;45(2):339-346. doi: 10.1177/0363546516665809.
2. Hyaluronic Acid Market Size, Share & Trends Analysis Report By Application (Dermal Fillers, Osteoarthritis (Single Injection, Three Injection, Five Injection), Ophthalmic, Vesicoureteral Reflux), By Region, And Segment Forecasts, 2020 – 2027. Grand View Research.
3. Platelet-rich plasma successfully treats dry eye *Primary Care Optometry News*, December/January 2012.