# Mountain Medical Specialties Inc

# Laser Activated Very Small Embryonic Like (VSEL) Cells in the Plasma Rich Plasma (PRP) Informed Consent

## Background

Platelet rich plasma, also known as "PRP", is a therapeutic treatment whereby a person's own blood is used as a source of growth factors and cytokines (signaling proteins) that stimulate tissue regeneration. Research scientists have identified in the platelet rich plasma, the presence of a group of stem cells known as Very Small Embryonic Like (VSEL) Stem Cells. It is proposed that the VSEL stem cells are "tissue forming" stem cells in the same way as embryonic stem cells and therefore theoretically capable of making any of the different tissues and cells of the body. The VSEL stem cells are found in circulating blood, but in normal circumstances they seem to be biologically inactive. It is thought that VSEL stem cells may be a remnant of biological development that were active in the developing fetus but became inactive shortly after birth and for the rest of the person's life. Research has noted that the best and easiest way to isolate these VSEL stem. cells is to collect peripheral blood from a vein and process the blood in a centrifuge to produce a fraction of the blood known as platelet rich plasma (PRP). The PRP fraction is known to contain not only a high number of platelets, a variety of different growth factors and cytokines but also VSEL stem cells. Researchers have reported that the VSEL stem cells appear to be biologically inactive. A research medical doctor, Dr. Todd Ovokaitys, has reported that VSEL stem cells can be activated by the application of modulated infrared coherent laser light. The activated VSEL stem cells, when returned to the individual from whom the blood was harvested by injection into specific anatomic sites, e.g., the knee joint, or reinjected into a vein, function as the individual's active stem cells.

## Standard PRP Harvesting Protocol

PRP harvesting protocols have been established for over 20 years. PRP has proven effectiveness extending across multiple medical specialties including cardiovascular surgery, orthopedics, sports medicine, podiatry, ENT, neurosurgery, dental and maxillofacial surgery (dental implants and sinus elevations), urology, dermatology (chronic wound healing), ophthalmology and cosmetic surgery. Areas typically treated for aesthetic purposes and skin rejuvenation include: Crinkling skin around the eyes, cheeks and mid face, neck, jaw-line, chest and décolletage, back of hands and arms, lips, as well as stimulating hair growth on the scalp. Almost all skin tones show that PRP is safe and effective because your own enriched plasma is used.

#### PRP Laser Activation Protocol

The PRP Laser Activation Protocol Developed by Dr. Todd Ovokaitys is proprietary and not published in the scientific literature. Dr Bart Flick has developed an alternative PRP laser activation protocol to activate the PRP fraction containing the **VSEL stem cells.** The PRP Laser Activation Protocol, developed by Dr. Flick, first collects sixty milliliters of blood, and separates the red blood cells from the blood plasma by the standard centrifuge protocol used for harvesting PRP. This centrifuged fraction is then radiated with low energy infrared coherent laser light and then returned to the patient via the IV that was used to draw the blood. The full procedure takes approximately 45 minutes to an hour.

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#### The Dr Flick VSEL Stem Cell Laser Activation Protocol

Laser activated **VSEL stem cell** therapy is not a "cure". No such claims are possible. Patients who have experienced the laser activated **VSEL stem cell** therapy report an overall improvement in their quality of life. The most benefit is seen when the treatment is used in the early stages of disease or trauma. More clinical application is needed to confirm this observation. It may well be true based on the fact that scar and fibrous tissue is common in persistent disease but is not common as the start of the disease. Scar and fibrous tissue may reduce the effectiveness of any stem cell therapy. The benefit of laser activated **VSEL stem cells** is also enhanced when the patient is treated in a holistic way. i.e., combining all the things the patient needs rather than just an injection of stem cells. Much more basic scientific research and further detailed clinical trials are needed. It has the potential of making enormous contributions to the regenerative promise of the future.

#### Contraindications of Laser Activated PRP

Laser activated PRP is safe for most individuals between the ages of 18-80. There are very few contraindications, however, patients with the following conditions may not be candidates:

- 1. Acute and Chronic Infection, Sepsis
- 2. Cancer (must be in remission for 1 year)
- 3. Chemotherapy treatments (within 1 year)
- 4. Severe metabolic and systemic disorders
- 5. Abnormal platelet function- blood disorders, Hemodynamic Instability, Hypofibrinogenemia, Critical Thrombocytopenia
- 6. Chronic Liver Disease
- 7. Anti-coagulation Therapy
- 8. Oral or systemic corticosteroid use- must be off for 2 weeks before treatment

#### Risks of Laser Activated PRP

Some of the potential side effects of Platelet Rich Plasma include:

- 1. Pain at the injection site
- 2. Bleeding, bruising and/or Infection as with any type of injection
- 3. Allergic reaction to the solution
- 4. Headache, dizziness, lightheaded or fainting
- 5. Temporary blood sugar increase.

#### Alternatives to Laser Activated PRP

Alternatives to laser activated plasma are:

- 1. Do nothing
- 2. Laser & light based treatments like Pulsed Light therapy

#### Results of Laser Activated PRP

Patients may experience a mild euphoria for up to 24 hours after the IV. Pain reduction may be experienced over the seven days after the IV. The application of the Laser Disc is recommended for the 14 days after the IV.

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### Informed Consent for Laser Activated Plasma

My consent and authorization for this elective procedure is strictly voluntary. By signing this informed consent form, I hereby grant authority to Dr. Arthur Flick MD to perform the Laser Activated PRP. I have read this informed consent and certify I understand its contents in full. All my questions have been answered to my satisfaction and I consent to the terms of this agreement. I understand that medicine is not an exact science and acknowledge that no guarantee has been given or implied by anyone as to the results that may be obtained by this treatment. I also understand this procedure is "elective" and not covered by insurance and that payment is my responsibility. Payment is expected in full at the time of treatment and is non-refundable. I hereby give my voluntary consent to this PRP procedure and release Mountain Medical Specialties Inc and Dr Arthur Flick MD from liability associated with the procedure. I certify that I am a competent adult of at least 18 years of age and am not under the influence of alcohol or drugs. This consent form shall be binding upon my spouse, relatives, legal representatives, heirs, administrators, successors, and assigns. I agree that if I should have any questions or concerns regarding my treatment, I will notify Mountain Medical Specialties and Dr. Arthur Flick immediately so that timely follow-up and intervention can be provided.

Patient Name (print)	Patient Signature	Date
Practitioner (print)	Practitioner Signature	 Date