To: Justin Crockett, Dentist/Owner

From: Zahra Surani, Dental Hygienist

Date: June 15, 2015

Subject: Incorporation of Laser therapy for Management of Gum Disease

**Introduction**

Gum disease includes gingivitis, bleeding and inflammation of gums, and periodontal disease, infection of gums and surrounding tooth structures including the ligaments that connect the tooth to the bone and the bone itself. Bacterial plaque buildup is a leading cause of this disease and we have to educate and provide our patients with the best techniques available to provide proper care. Laser Therapy is a modern technology that we should make use of as it helps treat the disease. It is a light that is attracted to and kills bacteria causing gum disease. When the laser is placed in the pocket of the gingival it becomes sterile, which in turn heals the gum tissue. This is a less invasive procedures than what we are currently using, the Arestin antibiotic, because the laser is simply a light that kills bacteria rather than a drug that is slowly released under the gums.

Gum disease is prevalent in individuals between the ages of 30-60, who have weakened immune systems or who smoke. This disease is commonly seen in our dental office and if it is not controlled efficiently we are not helping our patients reach optimal oral health. The laser, over time, will be less expensive for the office and our patients than Arestin. New technologies should be used to give our patients the best treatment available.

**Statement of Problem**

Most of our patients present with mild gingivitis at the least and many fall under the risk categories for gum disease that can benefit from laser therapy. Currently we are using the antibiotic, Arestin, to treat our patients. The major implications to this problem are the expenses to the office and our patients and we are not offering up to date treatment that is available, laser therapy.

**Proposed Solution**

One solution to the problem would be to purchase the laser machine and start to book laser therapy services as part of patients’ routine appointment. Although it is a big expense, it will work out to be less expensive than Arestin in the future as we continue to do more treatment on our patients. We can also continue to use Arestin as needed so we have more than one option for treatment of the disease.

**Scope**

To assess feasibility for purchasing the laser machine, I plan to pursue the following inquiries:

1. Compare the costs of Arestin versus LAPT
2. Check insurance codes and coverage for Arestin versus LAPT
3. Assess the amount of gum disease patients in the office
4. Get permission and conduct a survey to determine patient needs
5. Determine prices for laser therapy that patients and the office can bare
6. Discuss the laser option with office manager and associate dentist

**Methods**

My primary sources of data will include an interview and consultation with the Office Manager, Mark and the associate Dentist, Dr. Miller. I will also conduct a patient survey to demonstrate the need for laser treatment.

Secondary research will include evidence-based research on laser and Arestin treatments and a cost-benefit analysis (CBA) to assess the efficacy of either treatment.

**My Qualifications**

I have been a Dental Hygienist for 5 years and have taken the laser course and used it for treatment with my patients. I have treated a lot of patients with periodontal disease without using laser treatment and have seen much better results with the laser. Also, I am familiar with the disease progression and regression to know when certain treatments and techniques work.

**Conclusion**

With the costs of Arestin for both patients and the office, it is clear that we are losing both ways. Using the laser will be more beneficial to both parties. By addressing the five inquiries mentioned above, I can determine the feasibility of the laser over Arestin. With your approval I can begin my research immediately.