
Contact Information:

For scheduling call (650) 725-4656
between 7am and 5:30.

How should I prepare to receive photopheresis?

Key points to remember:

- Call 1 hour prior to the photopheresis to allow enough time for the machine calibration
- Avoid fluids prior to the treatment – drink plenty (up to 8 glasses) the day before. Take diuretics after the procedure.
- Avoid high fat content food as they make treatment less effective.
- Uvadex makes you photosensitive. Bring the sunglasses to use during the procedure, apply at least SPF 30 sunblock thereafter.
- Wear comfortable clothing; bring your favorite movies to watch.
- Heavy lifting should be avoided for at least 4 hours after the procedure

Extracorporeal Photopheresis

What is photopheresis?

Photopheresis (ECP) is a type of medical therapy that can be used in treating patients with problems associated with cutaneous (skin) T-cell lymphoma (CTCL) such as mycosis fungoides (MF) or Sezary syndrome. ECP is also used to treat conditions including graft-versus-host disease (GVHD) and organ transplant rejection. It was developed by THERAKOS®, a Johnson & Johnson company. Photopheresis treatments at Stanford Medical Center are given at the Cancer Center in the Apheresis Area.

How does photopheresis work?

The process requires the patient's blood to be temporarily drawn intravenously and then the white-blood cells (WBCs) are separated before the rest of the blood is returned to the patient. The WBCs are then mixed with a liquid medication called psoralen (UVADEX®), which makes the T-lymphocytes more sensitive to ultraviolet (UVA) light, which damages cell membrane and DNA, initiating cell death. Then the treated WBCs are reinfused to the patient. The mechanism of photopheresis is still unclear, and there are several theories on possible ways it works. One of the hypothesis is immunomodulatory effect, which proposes that treated cells produce anti-inflammatory cytokines and stimulate regulatory T-cells, which increases response of the immune system and begins to produce healthy lymphocytes to fight against those cells.

How long does the treatment take?

Photopheresis is usually performed twice a week separated by 2-4 weeks. The frequency of treatments depends on condition and doctors

decision. Patients who live locally commute daily to receive their treatment. A brochure with a list of affordable, nearby hotels and motels is provided for patients who live far away and need a place to stay overnight. The treatment itself takes about three to four hours each day. Patients can usually drive home after their treatment,

Does photopheresis have side effects?

The advantage of photopheresis is that the side effects are minimal including a temporary low-grade fever, slight nausea, increased redness of skin 6 to 8 hours after the treatment, and dizziness. The severity of these side effects is highly variable depending on the individual. Because the WBCs have been treated by the UVADEX®, there may be some sensitivity to light. ECP treatment does not lead to suppression of the patient's immune system nor does it adversely affect the patient's organs such as kidneys, liver, heart, and lungs.

Will photopheresis work for me?

Everyone is different and has a different response to photopheresis. Clinical trial data shows that 73% of patients with CTCL responded with a 64% decrease in skin conditions after twenty-two weeks of therapy. It usually takes several treatments to see an improvement. In patients with GVHD, ECP can help reduce and eliminate their need of immune suppressive therapies.

Are there any risks?

Photopheresis is done with sterile technique and the only blood that the patient will be exposed to is his or her own. The doctor should always be aware of the patient's blood pressure and blood count to make sure the

patient will be able to tolerate the temporary removal of blood for a couple of hours without risks. Patients may be at risk of bruising around the area where they receive the treatment, but cases of infection are very rare. Patients who have an allergy to psoralen drugs should not have photopheresis treatments. Patients with significant kidney, heart, or lung problems are also cautioned when using ECP treatment due to the extra fluid that the patient receives (about 500cc) towards the end of the treatment. Also, a blood thinning medication called heparin is administered during the treatment to prevent blood clotting and so patients with bleeding problems should discuss these problems with their doctor before receiving ECP treatments. Patients who are scheduled to have surgery should notify the doctor so that complications can be avoided by working around the schedule of the surgery.