Autologous Serum Eye Drops

What are Autologous Serum Eye Drops (ASEDS)? Autologous means that the donor and the recipient are the same person. The eye drops in this case are made from your own blood. Red blood cells and clotting factors like fibrinogens are removed, leaving behind blood serum. This is then diluted with a sterile, preservative-free solution to produce a tear substitute that is unique to the patient, and contains many important growth factors and nutrients normally found in healthy tears. Since blood and tears have an almost identical salinity and pH, there is no issue of burning or stinging upon instillation. Because they are non-preserved, the drops must be frozen at all times until use.

What is involved in attaining serum tears? Two steps are required to make serum tears: a single blood draw of 250ml at a laboratory then formulating the serum tears at a compounding pharmacy. The patient has to go to the NY Blood Center for a blood draw, the blood is processed, and then is sent to the compounding pharmacy to be processed into useable eye drops. Within 3-4 weeks the serum tears will be ready, at which point the NY Blood Center will contact your doctor’s office to arrange a delivery of the serum tears. Completed serum tears are delivered and packaged with dry ice weighing about 5lbs. Patients are advised when picking up serum tears to bring their own cooler if you are unable to carry this weight in order to keep them frozen until they are ready to be used.

Location sites:

NY Blood Center
310 east 67th street
NY, NY 10065
212-570-3242

NY Blood Center Compounding Lab
4501 Vernon BLVD
Long Island City, NY 11101

How do you use them? Transported ASEDS come in plastic spaghetti tubing segments that can be sectioned off at their perforated edges. Your doctor will further advise you on the usage and maintenance of these drops.

How much do they cost? The cost for autologous serum eye drops is $575 from a typical 250ml blood draw which is roughly a 3month supply depending on the amount of daily usage. Patients are only allowed a single blood draw of 250ml (approximately 1.5 pint) at each appointment.

Will my insurance cover the cost? Insurances will probably not pay for serum eye drops any more than they pay for artificial tears. However, we will happily submit a letter of medical necessity on your behalf if you wish to challenge the claim.

When will I know if they’re working? Everyone is different, but for those patients who experience relief using autologous serum eye drops it is usually seen within the first few weeks.