

Investigation to examine whether a drug (anti-VEGF) injected locally into the eye passes into the bloodstream

Ongoing study 2020-2022

Background and purpose

Many premature babies run the risk of developing the eye disorder retinopathy of prematurity (ROP). To identify ROP that requires treatment, a large number of premature babies undergo eye examinations. Although the standard treatment in the past has been laser therapy, the use of medication has emerged in recent years. Medication takes the form of an intravitreal injection in order to slow down the pathological progression of this retinal disorder. There are several different anti-VEGF molecules available, including ranibizumab (Lucentis®) and bevacizumab (Avastin®). The aim of the treatment is to bind a vascular growth factor known as VEGF.

Studies have shown that different types of anti-VEGF molecules bind to VEGF in different ways. The focus has been on examining VEGF levels and injected anti-VEGF in the circulatory system to determine whether a drug injected locally into the eye passes into the bloodstream. Studies have shown that treatment with bevacizumab reduces VEGF levels in both serum and plasma for weeks and up to months following treatment. In the case of ranibizumab, the results are contradictory with regard to VEGF levels in serum and plasma following injection of the drug. Our aim in this project is to investigate the best way of measuring anti-VEGF and VEGF levels following injection into the eye.

What form will the study take?

If your child will be eligible to participate in the study and if you decide to participate, you will get more information about the study and you will be required to sign a written consent form before you start with anti-VEGF treatment.