Galactose-1-phosphate

Description	Galactose-1-phosphate is a key metabolite of galactose catabolism. It is a substrate for the enzyme galactose -1-phosphate uridyltransferase(GALT)
Indication	The quantitative measurement of galactose-1 phosphate is useful for monitoring compliance with dietary therapy for classic galactosemia (GG) patients, Duarte galactosemia (DG) patients, or patients with uridine diphosphate galactose-4-epimerase (GALE) deficiency. During the initial workup of the patient, this test also can indicate the relative condition of the patient and the need for immediate intervention.
Additional Info	Galactose-1-phosphate accumulates in the erythrocytes of patients with galactosemia due to a GALT or GALE deficiency. it is thought to be the causative factor for development of liver disease in these patients. Galactosemia is treated by a galactose-restricted diet, which allows for rapid recovery from the acute symptoms and a generally good prognosis. Despite adequate treatment from an early age, individuals with galactosemia remain at increased risk for developmental delays, speech problems and abnormalities of motor function. Females are at increased risk for premature ovarian failure as well.
Concurrent Tests	None
Dietary Requirements	None
Interpretation	In general, patients with GALT or GALE galactosemia should maintain galactose-1-phosphate levels as low as possible. The interpretation of the results will depend on the specific method for analysis, units of measure and reference ranges of the referral lab.
Collection Conditions	**Please call the clinical biochemistry of the Royal Liverpool University Hospital to arrange the test before you take the sample !!!** Whole venous blood, at least 1 ml, unseparated in a lithium heparin container, must be transported at room temperature and received at the clinical biochemistry of Birmingham Children's Hospital within 24 hours of collection.
Frequency of testing	Frequent testing not necessary.