ALLTogether; Sampling during PEG-asparaginase treatment for patients ≥ 25 years.

Includes

Minimal sampling (trough levels on infusions days)

Recommended extra sampling in NOPHO for prediction of hypersensitivity

Peak levels and toxicity (A2G substudy); minimum of sampling is indicated, but peak levels may be taken on *all* infusions days. Samples <u>must</u> be taken within one hour after infusion termination (*study only for i.v. administrations*).

No colour = no sampling

<u>Hepatotoxicity (bilirubin, TG, ALT):</u> x=sampling in relation to the study "Peak levels and toxicity", (x)=recommended extra sampling. It is also recommended to take liver test at the beginning of maintenance as part of this study.

The enzyme activity measurements at the correct time-points after PEG-asparaginase infusion are essential for the recommendations of the subsequent dosing.

	Sampling day															
ALL PATIENTS	18 inf. day	25	32													
Peak levels Hepatotoxicity	X		X													
SR	71 inf. day	78	85 inf. day	92	99 inf. day	103	113									
Peak levels Hepatotoxicity	X		X		X	(X)	X									
IR-high	78 inf. day	85	92 inf. day	96	106 inf. day	110	120 inf. day	134 inf. day	148 inf. day	162 inf. day	169	211				
Peak levels Hepatotoxicity	X		X		X		X			X	(X)	X				
HR	A1 inf. day	A1 7 d after inf.	B1 inf. day	B1 7 d after inf.	C1 inf. day	C1 7 d after inf.	A2 Inf. day	A2 7 d after inf.	B2 inf. day	B2 7 d after inf.	C2 inf. day	C2 7 d after inf.	DI Inf. day	316 7 d after inf.	323 inf. day	
Peak levels Hepatotoxicity		X		X		X		X		X		X		X	X	·

In case of treatment delays, samples should be taken \leq 14 days after the last PEG-asparaginase dose in order to make any conclusions for treatment recommandations.

In case of allergic reaction:

If asparaginase is administered i.v. a sample must be taken immediately after the infusion is stopped, and if possible an additional sample the same day or the day after

If asparaginase is administered i.m. a sample must be taken 1 day after the administration of asparaginase, and if possible an additional sample 2 days after administration

Both after i.v. and i.m. administration, we recommend an additional sample after 7 days to identify increased clearance. Samples:

Register your patient in REDCap (redcap.au.dk) including details of the last dose and actual sample.

Sampling: 2 ml of plasma: (optimally divided in two tubes)

4 ml EDTA blood. After centrifugation 10-15 min. at 20°C, 2000 g. Aliquote plasma into two ml tubes - (i.e. 2ml Saarstedt ref. 72.694, or 1.8 ml NUNC cat. No363401). **Tubes must be labeled with date, name and date of birth., and Castor number**

Send samples as soon as possible by standard mail to: Aarhus Universitetshospital

ATT: Dorte Emilie Wulff Tlf +45 51223870

Børn og Unge Forskning. Indgang G8 -krydspunkt G211

Palle Juul-Jensens Boulevard 99

8200 Aarhus N. Denmark.

The treating centers must cover the shipment of samples by standard mail. The samples will be analysed for free.

<u>Recommendation for the subsequent treatment</u> (continue PEG-asparaginase/change to Erwinia asparaginase/stop asparaginase treatment) will appear in REDCap before the next planned PEG-asparaginase dose.

Questions regarding REDCap; please contact Karen Møller (research nurse), e-mail <u>karemoel@rm.dk</u>, mobile +45 51816912 or Dorte Emilie Wulff (biomedical laboratory scientist), e-mail <u>dorwul@rm.dk</u>. Questions regarding treatment recommendation; please contact Birgitte Klug Albertsen, e-mail <u>biralber@rm.dk</u>, mobile +45 20224643.