

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

Includes:

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

No colour = no sampling

Hepatotoxicity (bilirubin, TG, ALT): 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														
<b>ALL PATIENTS</b>	4 inf. day	11	18 inf. day	32											
Peak levels Hepatotoxicity	x		x	x											
<b>SR</b>	71 inf. day	78	85 inf. day	99	120										
Peak levels Hepatotoxicity	x		x	x	x										
<b>IR-low</b>	78 inf. day	85	92 inf. day	106 inf. day	110	176									
Peak levels Hepatotoxicity	x		x	x	x	x									
<b>IR-high</b>	78 inf. day	85	92 inf. day	106 inf. day	120 inf. day	134 inf. day	148 inf. day	211							
Peak levels Hepatotoxicity	x		x		x	x		x							
<b>HR</b>	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 ≤ 14 days after the last PEG-asparaginase dose in order to make any conclusions for treatment recommendations.**

**In case of allergic reaction:**

**If asparaginase is administered i.v. a sample must be taken immediately after the infusion is stopped, and an additional sample 1 and 7 days after.**

**If asparaginase is administered i.m. a sample must be taken 1 day after the administration of asparaginase, and an additional sample 2 and 7 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 Saerstedt 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: Derya Pero Ayyildiz mobile +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.

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

Questions regarding REDCap; please contact contact Karen Møller (research nurse), e-mail [karemoel@rm.dk](mailto:karemoel@rm.dk), mobile +45 51816912  
Derya Pero Ayyildiz (biomedical laboratory scientist) mobile +45 51223870, e-mail [DEROEZ@rm.dk](mailto:DEROEZ@rm.dk). Questions regarding treatment recommendation; please contact Birgitte Klug Albertsen, e-mail [biralber@rm.dk](mailto:biralber@rm.dk), mobile +45 20224643.