

Haloperidol

General	
• Class of the drug:	Neuroleptics
• Synonym(s):	
• Common trade name(s) in Switzerland:	Haldol®, Haldol® decanoas
• Conversion factors:	$\mu\text{g/l} \times 2.66 = \text{nmol/l}$ $\text{nmol/l} \times 0.38 = \mu\text{g/l}$
Clinical pharmacology	
• Indications for TDM:	Individual dose adaptation, verification of compliance, side effects, suspicion of toxicity
• Protein binding:	92 %
• Elimination half-life:	24 h (12 h – 38 h)
• Volume of distribution:	7.9 ± 2.5 l/kg
• Metabolism:	
- Main metabolic pathways:	CYP3A4, CYP2D6 and reduction
- Active metabolite(s)?	None
- Inhibitor or inducer of the cytochrome P450 system?	Reduced haloperidol (metabolite; inhibits CYP2D6)
- Other significant pharmacokinetic interactions:	No
• Elimination of parent drug:	Mainly hepatic
• Typical therapeutic range:	3.8 – 38.0 $\mu\text{g/l}$ (10 – 100 nmol/l)
• Potentially toxic concentration:	49.4 $\mu\text{g/l}$ (> 130 nmol/l)
Pre-analytics	
• Time to steady-state since beginning of treatment or change of posology:	~ 5 days
• Time for blood sampling:	Before next dose at steady state
• Type(s) of sample:	Serum or plasma
• Stability:	One week at 4°C

Analytics	
<ul style="list-style-type: none"> Position(s) in the analysis list/Method: 	8636.02 HPLC/GC 8636.03 HPLC-MS/GC-MS
Remarks	None
References	<ul style="list-style-type: none"> • <i>Compendium suisse des médicaments, Documed, 2005</i> • <i>Llerena et al., Ther. Drug Monit. 14 (1992) 92</i> • <i>Pan et al., Ther. Drug Monit. 20 (1998) 224</i> • <i>Helle et al., Ther. Drug Monit. 23 (2001) 157</i> • <i>Baumann et al., Pharmacopsychiatry 37 (2004) 243</i>