Filling gaps on stability data: Development, validation and application of a multianalyte UHPLC-DAD method to determine the stability of commonly administered drugs in different carrier solutions used in palliative care

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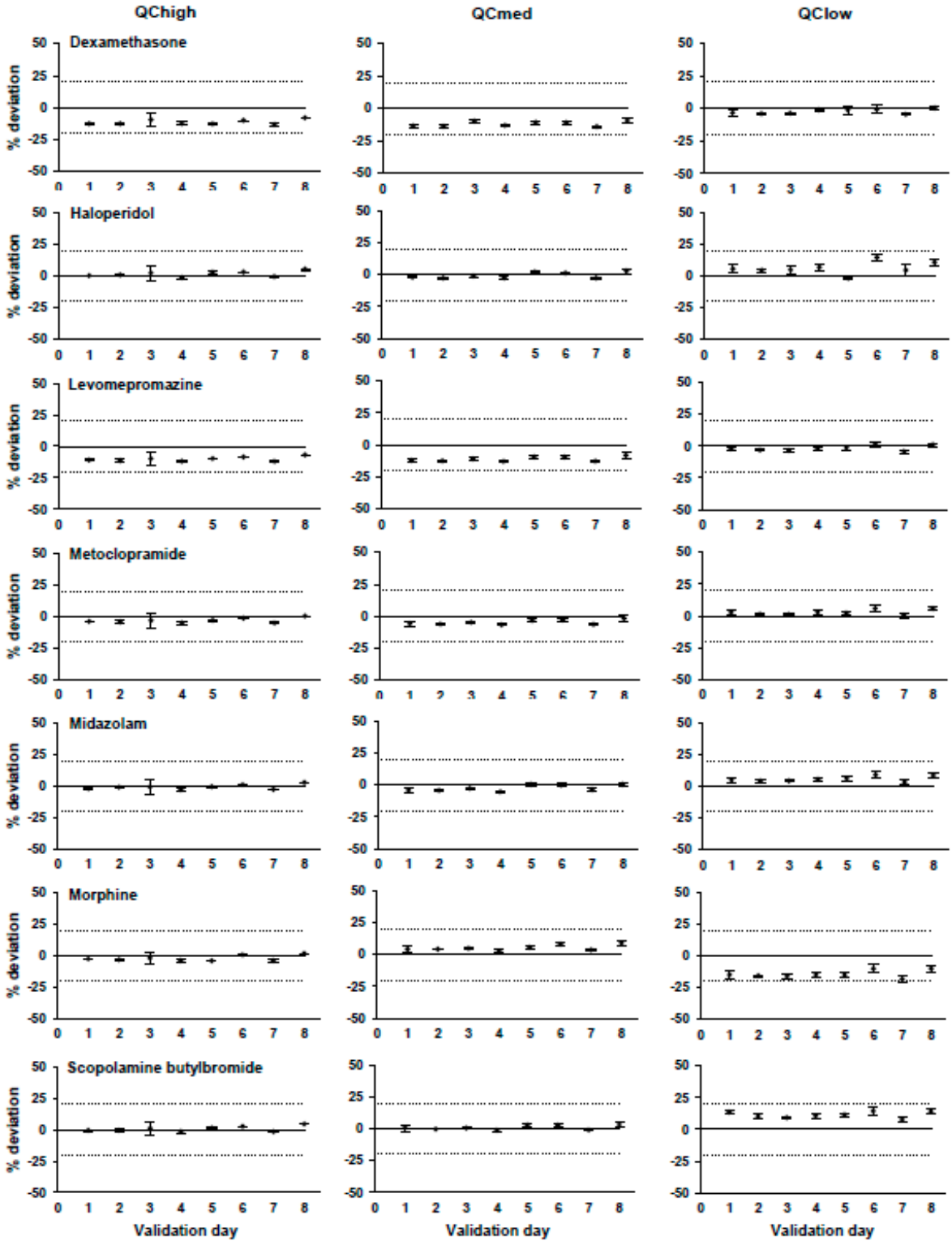

Figure S1: Stability of calibration was assessed over 28 days; freshly prepared QC samples were calculated against calibration curve of day 1.

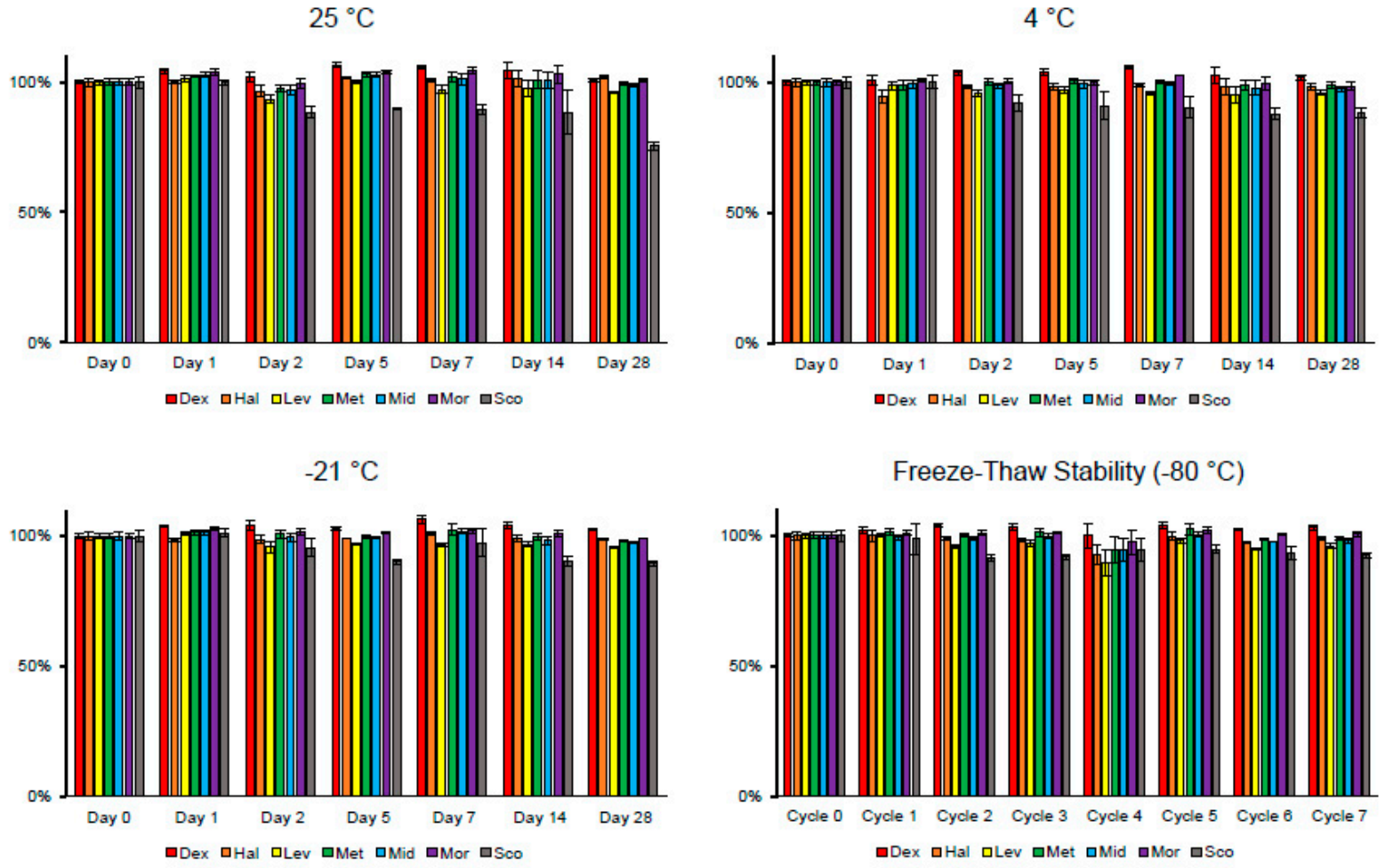

Figure S2: Stability data of QCmed under different storage conditions

Table S1: Overview of applied gradients

Gradient 1			**Gradient 2**			**Gradient 3**		
t (min)	% ACN	% H_2O	t (min)	% ACN	% H_2O	t (min)	% ACN	% H_2O
0	5/2	95/98	0	5/2	95/98	0	5/2	95/98
1	5/2	95/98	1	5/2	95/98	1.5	5/2	95/98
9	100	0	7	100	0	8.5	80	20
11	100	0	12	100	0	9	100	0
12	5/2	95/98	13	5/2	95/98	10.5	100	0
14	5/2	95/98	15	5/2	95/98	12	5/2	95/98
						14	5/2	95/98

Table S2: Overview of calibrator, QC and test concentrations. All concentration are given in mg/mL

Analyte	Concentration	K1	K2	K3	K4	K5	K6	QC High	QC Med	QC Low
DexP	**0.4**	0.41	0.33	0.16	0.07	0.06	0.04	0.37	0.19	0.05
Hal	**0.5**	0.52	0.41	0.21	0.08	0.07	0.05	0.46	0.23	0.06
Lev	**2.5**	3.24	2.59	1.30	0.52	0.45	0.32	2.92	1.46	0.37
Met	**3.0**	3.30	2.64	1.32	0.53	0.46	0.33	2.93	1.46	0.37
Mid	**1.2**	1.20	0.96	0.48	0.19	0.17	0.12	1.08	0.54	0.14
Mor	**5.0**	5.18	4.14	2.07	0.83	0.73	0.52	4.45	2.23	0.56
Sco	**7.0**	7.32	5.85	2.93	1.17	1.02	0.73	6.43	3.21	0.80

Table S3: Stability data of DexP in various combinations.

		DexP		Hal		DexP		Lev		DexP		Mid	
	Time [h]	Mean [%]	SD	Mean [%]	SD	Mean [%]	SD	Mean [%]	SD	Mean [%]	SD	Mean [%]	SD
0.9% NaCl RT	0	99.6	0.9	97.8	0.1	46.2	2.5	82.4	2.0	89.9	3.4	94.1	2.1
	4	100.0	0.8	100.0	0.9	34.8	0.5	78.6	0.8	89.1	3.4	93.2	1.5
	8	96.7	0.4	97.2	0.7	41.8	1.1	69.7	1.0	85.8	3.8	93.1	3.7
	24	98.3	1.3	98.2	2.1	37.5	0.5	81.6	0.8	84.2	1.4	91.2	0.3
	48	96.9	3.7	99.4	2.3	37.7	1.7	80.3	2.0	81.9	1.6	87.7	0.7
		DexP		Hal		DexP		Lev		DexP		Mid	
	Time [h]	Mean [%]	SD	Mean [%]	SD	Mean [%]	SD	Mean [%]	SD	Mean [%]	SD	Mean [%]	SD
0.9%NaCl 0 °C	0	100.0	2.8	100.0	2.1	60.6	1.2	94.7	2.2	93.8	4.3	99.5	4.0
	4	98.7	3.4	99.1	3.2	43.4	2.8	86.2	2.4	100.0	1.7	99.6	1.6
	8	98.1	1.1	98.2	0.4	38.3	1.6	84.5	0.8	98.5	3.1	98.3	2.6
	24	97.7	3.9	98.8	3.4	43.9	2.6	86.1	1.3	94.7	1.4	100.0	1.1
	48	98.2	1.8	96.9	0.4	51.6	1.9	89.0	1.2	93.4	3.0	98.7	2.8
		DexP		Hal		DexP		Lev		DexP		Mid	
	Time [h]	Mean [%]	SD	Mean [%]	SD	Mean [%]	SD	Mean [%]	SD	Mean [%]	SD	Mean [%]	SD
5% Glucose RT	0	93.5	3.4	95.9	3.3	31.5	0.5	83.3	1.0	100.0	2.5	100.0	2.3
	4	88.8	2.3	93.5	1.6	24.8	0.8	78.5	0.8	97.0	0.5	97.9	0.7
	8	85.8	1.3	90.0	0.9	28.0	0.6	77.8	0.3	95.1	0.9	95.4	0.8
	24	83.2	2.4	88.9	0.5	27.8	3.0	78.5	0.7	93.6	2.6	95.3	0.2
	48	82.7	2.5	89.5	1.4	24.8	4.3	79.6	0.3	88.2	0.3	94.4	0.5