

**Table S1.** Administrations of psychotropic drugs in hospitalized adolescents in 2008 (n=76 patients) and 2014 (n=76 patients)

Drugs	Administrations, n (mean/patient)		Off-label administrations, n (%) <sup>a</sup>		Dose [mg/day], median (range) <sup>b</sup>		Duration of administration [day], median (range)	
	2008	2014	2008	2014	2008	2014	2008	2014
<b>Antipsychotics</b>								
Levomepromazine (oral)	22	21	22 (100%)	21 (100%)	25 (11-54)	25 (10-98)	5 (1-41)	8 (1-55)
Levomepromazine (inj)	10 *	2 *	10 (100%)	2 (100%)	25 (12.5-50)	25 (25-25)	1 (1-11)	2.5 (1-4)
Quetiapine (IR) <sup>c</sup>	14	14	14 (100%)	10 (71.4%)	256 (25-414) #	55 (25-200) #	17 (1-111) #	3 (1-45) #
Quetiapine (XR) <sup>d</sup>	2 *	34 *	2 (100%)	34 (100%)	131 (50-213)	273 (50-800)	24 (1-47)	10 (1-51)
Olanzapine	16 *	5 *	16 (100%)	5 (100%)	11 (2.5-18)	18 (7.8-20)	14 (1-47)	11 (8-81)
Risperidone	15	13	8 (53.3%)	10 (76.9%)	1.8 (0.5-4)	1 (0.4-2)	8 (2-27)	12 (2-127)
Chlorprothixene	8 *	0 *	8 (100%)	-	17 (15-44)	-	7 (1-34)	-
Haloperidol (oral)	1	4	1 (100%)	3 (75%)	21 (21-21)	2.2 (0.8-4.4)	15 (15-15)	21 (6-72)
Haloperidol (inj)	2	0	2 (100%)	-	5 (5-5)	-	1 (1-1)	-
Amisulpride	4	3	4 (100%)	3 (100%)	503 (367-567)	175 (142-477)	19 (3-58)	34 (12-36)
Aripiprazole	1	2	1 (100%)	1 (50%)	10 (10-10)	6.4 (5-7.7)	10 (10-10)	9 (5-13)
Clozapine	1	0	1 (100%)	-	231 (231-231)	-	8 (8-8)	-
<b>Subtotal</b>	<b>96 (1.3)</b>	<b>98 (1.3)</b>	<b>89 (92.7%)</b>	<b>89 (90.8%)</b>				
<b>Antidepressants</b>								
Citalopram	12 *	1 *	12 (100%)	1 (100%)	20 (10-60)	20 (20-20)	17 (3-82)	26 (26-26)
Escitalopram	3	0	3 (100%)	-	10 (10-15)	-	13 (2-89)	-
Mirtazapine	4	0	4 (100%)	-	27 (18-30)	-	33 (7-92)	-
Sertraline	1 *	8 *	1 (100%)	8 (100%)	50 (50-50)	66 (47-100)	9 (9-9)	14 (3-49)
Fluoxetine	1	0	1 (100%)	-	40 (40-40)	-	6 (6-6)	-
Clomipramine	1	0	1 (100%)	-	25 (25-25)	-	10 (10-10)	-
Duloxetine	0	1	-	1 (100%)	-	30 (30-30)	-	84 (84-84)
<b>Subtotal</b>	<b>22 (0.29) #</b>	<b>10 (0.13) #</b>	<b>22 (100.0%)</b>	<b>10 (100.0%)</b>				
<b>Hypnotics</b>								
Zolpidem	6 *	0 *	3 (50%)	-	9.2 (5-11.3)	-	2.5 (1-13)	-
Zopiclone	3	1	3 (100%)	1 (100%)	7.5 (3.8-7.5)	7.5 (7.5-7.5)	3 (2-10)	8 (8-8)
<b>Subtotal</b>	<b>9 (0.12)</b>	<b>1 (0.01)</b>	<b>6 (66.7%)</b>	<b>1 (100%)</b>				

(continued)

**Table S1.** (continued)

Drugs	Administrations, n (mean/patient)		Off-label administrations, n (%) <sup>a</sup>		Dose [mg/day], median (range) <sup>b</sup>		Duration of administration [day], median (range)	
	2008	2014	2008	2014	2008	2014	2008	2014
<b>Anxiolytics</b>								
Lorazepam (oral)	22	20	1 (4.5%)	0 (0%)	1.1 (1-8)	1 (0.8-2.5)	3 (1-58) <sup>#</sup>	1.5 (1-8) <sup>#</sup>
Lorazepam (inj)	1	0	1 (100%)	-	4 (4-4)	-	1 (1-1)	-
Oxazepam	2	0	0 (0%)	-	35 (30-40)	-	9 (1-17)	-
Alprazolam	1	0	1 (100%)	-	1 (1-1)	-	4 (4-4)	-
Bromazepam	1	0	0 (0%)	-	1.5 (1.5-1.5)	-	2 (2-2)	-
Clorazepate	1	1	0 (0%)	0 (0%)	5 (5-5)	10 (10-10)	4 (4-4)	2 (2-2)
Diazepam	0	1	-	0 (0%)	-	7.5 (7.5-7.5)	-	4 (4-4)
Hydroxyzine	0	2	-	0 (0%)	-	54 (25-83)	-	11 (9-12)
<b>Subtotal</b>	<b>28 (0.38)</b>	<b>24 (0.32)</b>	<b>3 (10.7%)</b>	<b>0 (0.0%)</b>				
<b>Phytotherapy</b>								
Phytotherapy "Sleep" <sup>e</sup>	9	3	0 (0%)	0 (0%)	1 (1-1.4) <sup>h</sup>	1 (1-1) <sup>h</sup>	8 (3-19) <sup>#</sup>	4 (1-5) <sup>#</sup>
Phytotherapy "Sleep Strong" <sup>f</sup>	1	0	0 (0%)	-	1.1 (1.1-1.1) <sup>h</sup>	-	31 (31-31)	-
Phytotherapy "Relaxing" <sup>g</sup>	0	2	-	0 (0%)	-	1 (1-1) <sup>h</sup>	-	1.5 (1-2)
<b>Subtotal</b>	<b>10 (0.13)</b>	<b>5 (0.07)</b>	<b>0 (0.0%)</b>	<b>0 (0.0%)</b>				
<b>Others</b>								
Nicotine	1	0	0 (0%)	-	2.5 (2.5-2.5)	-	4 (4-4)	-
Biperiden (IR) <sup>c</sup>	3	3	0 (0%)	0 (0%)	2 (2-2.5)	2 (1.8-2)	1 (1-14)	1 (1-36)
Biperiden (XR) <sup>d</sup>	1	3	1 (100%)	3 (100%)	4 (4-4)	2 (2-4)	13 (13-13)	9 (1-65)
Biperiden (inj)	0	0	-	-	-	-	-	-
Valproate	1	0	1 (100%)	-	600 (600-600)	-	15 (15-15)	-
Methylphenidate	0	0	-	-	-	-	-	-
Atomoxetine	0	1	-	0 (0%)	-	25 (25-25)	-	13 (13-13)
Lamotrigine	0	1	-	1 (100%)	-	12.5 (12.5-12.5)	-	5 (5-5)
Melatonin	0	1	-	1 (100%)	-	3 (3-3)	-	5 (5-5)
<b>Subtotal</b>	<b>6 (0.08)</b>	<b>9 (0.12)</b>	<b>2 (33.3%)</b>	<b>5 (55.6%)</b>				
<b>TOTAL</b>	<b>171 (2.3)</b>	<b>147 (1.9)</b>	<b>122 (71.3%)</b>	<b>105 (71.4%)</b>				

<sup>a</sup> according to the approved indications in Switzerland at the moment of the study (2008 and 2014); <sup>b</sup> for each patient, a mean daily dose administered during the study period was calculated, the median (range) of these mean doses are reported here; <sup>c</sup> immediate drug release; <sup>d</sup> extended drug release; <sup>e</sup> Valerian Root dry extract 250 mg and Hop Strobile dry extract 60 mg; <sup>f</sup> Valerian Root dry extract 500 mg and Hop Strobile dry extract 120 mg; <sup>g</sup> Butterbur Root dry extract 90 mg, Passion Flower dry extract 90 mg, Valerian Root dry extract 90 mg and Melissa Leaf dry extract 60 mg; <sup>h</sup> dose expressed as tablet; \* Fisher's exact *p*-value < 0.05 between 2008 and 2014; <sup>#</sup> Mann-Whitney *p*-value < 0.05 between 2008 and 2014.