

Supplementary Table 1. Comparison of continuation of olanzapine and aripiprazole monotherapy after discharge, COX proportional hazards model

Observation period of 26 weeks												
	Crude model			Model 1			Model 2			Fully adjusted model		
	HR	(95%CI)	P value	HR	(95%CI)	P value	HR	(95%CI)	P value	HR	(95%CI)	P value
Discontinuation of treatment for any reason: OLZ vs. APZ	0.547	0.376 - 0.796	0.002	0.544	0.374 - 0.792	0.001	0.544	0.372 - 0.796	0.002	0.518	0.349 - 0.767	0.001
Sex				0.944	0.662 - 1.347	0.750	0.980	0.683 - 1.405	0.911	0.958	0.668 - 1.375	0.818
Age at discharge (years)				0.990	0.975 - 1.005	0.182	0.984	0.964 - 1.003	0.098	0.985	0.966 - 1.005	0.145
Duration of illness (years)							1.023	1.000 - 1.046	0.049	1.020	1.000 - 1.044	0.089
Duration of hospitalization (weeks)							0.988	0.979 - 0.998	0.016	0.988	0.979 - 0.998	0.015
Baseline CP equivalent dose (mg/day)										1.000	1.000 - 1.001	0.295
Concurrent use of anticholinergic drugs										1.298	0.886 - 1.901	0.180
Concurrent use of another antipsychotic for sleep (CP equivalent dose ≤ 25 mg)										0.969	0.510 - 1.839	0.922
Observation period of 52 weeks												
	Crude model			Model 1			Model 2			Fully adjusted model		
	HR	(95%CI)	P value	HR	(95%CI)	P value	HR	(95%CI)	P value	HR	(95%CI)	P value
Discontinuation of treatment for any reason: OLZ vs. APZ	0.670	0.479 - 0.936	0.019	0.670	0.479 - 0.937	0.019	0.661	0.471 - 0.928	0.017	0.659	0.466 - 0.933	0.019
Sex				0.945	0.697 - 1.281	0.715	0.992	0.728 - 1.350	0.957	0.984	0.723 - 1.341	0.921
Age at discharge (years)				0.998	0.985 - 1.011	0.733	0.992	0.976 - 1.009	0.351	0.993	0.977 - 1.009	0.400
Duration of illness (years)							1.020	1.002 - 1.039	0.032	1.021	1.002 - 1.041	0.027
Duration of hospitalization (weeks)							0.991	0.984 - 0.998	0.008	1.000	1.000 - 1.001	0.810
Baseline CP equivalent dose (mg/day)										0.991	0.984 - 0.997	0.006
Concurrent use of anticholinergic drugs										1.316	0.946 - 1.829	0.103
Concurrent use of another antipsychotic for sleep (CP equivalent dose ≤ 25 mg)										0.769	0.427 - 1.385	0.382
Observation period of 104 weeks												
	Crude model			Model 1			Model 2			Fully adjusted model		
	HR	(95%CI)	P value	HR	(95%CI)	P value	HR	(95%CI)	P value	HR	(95%CI)	P value
Discontinuation of treatment for any reason: OLZ vs APZ	0.803	0.596 - 1.080	0.148	0.799	0.593 - 1.077	0.141	0.794	0.588 - 1.072	0.132	0.797	0.586 - 1.084	0.148
Sex				1.042	0.803 - 1.353	0.755	1.089	0.836 - 1.420	0.527	1.096	0.841 - 1.429	0.498
Age at discharge (years)				0.996	0.985 - 1.007	0.498	0.993	0.979 - 1.007	0.336	0.994	0.980 - 1.008	0.372
Duration of illness (years)							1.013	0.997 - 1.029	0.112	1.016	1.000 - 1.033	0.052
Duration of hospitalization (weeks)							0.995	0.991 - 0.999	0.015	0.994	0.990 - 0.999	0.009
Baseline CP equivalent dose (mg/day)										1.000	0.999 - 1.001	0.646
Concurrent use of anticholinergic drugs										1.211	0.909 - 1.613	0.190
Concurrent use of another antipsychotic for sleep (CP equivalent dose ≤ 25 mg)										0.586	0.335 - 1.027	0.062

OLZ olanzapine, APZ aripiprazole, CI confidence interval, HR hazard ratio, CP chlorpromazine

Model 1: adjusted for sex, age at discharge in Cox proportional hazards model

Model 2: adjusted for sex, age at discharge, duration of illness, duration of hospitalization in Cox proportional hazards model

Fully adjusted model: adjusted by sex, age at discharge, duration of illness, duration of hospitalization, baseline CP equivalent dose (mg/day), concurrent use of anticholinergic drugs, concurrent use of another antipsychotic for sleep (CP equivalent dose ≤ 25 mg)

Supplementary Table 2. Comparison between OLZ and APZ treatment divided by high or low doses (Cox proportional hazards model)

A. High dose of olanzapine versus aripiprazole

	Observation period of 26 weeks						Observation period of 52 weeks						Observation period of 104 weeks					
	Crude model			Fully adjusted model			Crude model			Fully adjusted model			Crude model			Fully adjusted model		
	HR	(95%CI)	P value	HR	(95%CI)	P value	HR	(95%CI)	P value	HR	(95%CI)	P value	HR	(95%CI)	P value	HR	(95%CI)	P value
OLZ high dose vs. APZ high dose																		
Treatment discontinuation																		
For any reason	0.580	0.363-0.928	0.023	0.538	0.313-0.923	0.024	0.732	0.474-1.131	0.160	0.701	0.428-1.146	0.156	0.846	0.574-1.246	0.397	0.816	0.528-1.262	0.360
Lack of efficacy	0.462	0.200-1.069	0.071	0.388	0.146-1.031	0.058	0.523	0.231-1.183	0.120	0.497	0.194-1.270	0.144	0.585	0.292-1.170	0.130	0.539	0.242-1.198	0.129
Intolerability	2.488	0.315-19.657	0.387	4.486	0.529-38.030	0.169	4.526	0.602-34.025	0.142	5.818	0.724-46.751	0.098	6.510	0.880-48.136	0.066	9.240	1.198-71.293	0.033
Patient decision	0.414	0.069-2.483	0.335	0.384	0.045-3.239	0.379	0.270	0.054-1.340	0.109	0.291	0.044-1.905	0.198	0.364	0.081-1.627	0.186	0.430	0.075-2.472	0.345
Hospitalization for psychosis exacerbation	0.443	0.215-0.913	0.027	0.368	0.158-0.857	0.021	0.614	0.311-1.213	0.160	0.528	0.243-1.148	0.107	0.748	0.405-1.381	0.354	0.618	0.307-1.241	0.176
Other reasons	1.131	0.240-5.326	0.877	0.815	0.131-5.061	0.826	1.010	0.282-3.621	0.988	0.937	0.210-4.182	0.932	0.898	0.293-2.755	0.851	0.782	0.208-2.938	0.716

B. Low dose of olanzapine versus aripiprazole

	Observation period of 26 weeks						Observation period of 52 weeks						Observation period of 104 weeks					
	Crude model			Fully adjusted model			Crude model			Fully adjusted model			Crude model			Fully adjusted model		
	HR	(95%CI)	P value	HR	(95%CI)	P value	HR	(95%CI)	P value	HR	(95%CI)	P value	HR	(95%CI)	P value	HR	(95%CI)	P value
OLZ low dose vs. APZ low dose																		
Treatment discontinuation																		
For any reason	0.506	0.271-0.944	0.032	0.606	0.316-1.160	0.130	0.590	0.349-0.998	0.049	0.684	0.399-1.174	0.168	0.750	0.471-1.192	0.223	0.830	0.517-1.335	0.443
Lack of efficacy	0.225	0.076-0.671	0.007	0.277	0.089-0.861	0.026	0.296	0.107-0.816	0.019	0.364	0.129-1.028	0.056	0.356	0.143-0.885	0.026	0.399	0.156-1.026	0.056
Intolerability	1.269	0.278-5.793	0.758	1.693	0.351-8.175	0.512	1.897	0.434-8.295	0.395	2.231	0.493-10.101	0.298	2.783	0.654-11.834	0.166	3.141	0.723-13.648	0.127
Patient decision	na			na			0.187	0.042-0.835	0.028	0.206	0.043-0.990	0.049	0.314	0.084-1.169	0.084	0.306	0.076-1.233	0.096
Hospitalization for psychosis exacerbation	0.875	0.241-3.180	0.839	1.091	0.286-4.154	0.899	1.458	0.427-4.976	0.547	1.772	0.510-6.152	0.368	1.560	0.541-4.496	0.411	1.910	0.655-5.568	0.236
Other reasons	0.184	0.031-1.104	0.064	0.184	0.026-1.295	0.089	0.199	0.045-0.892	0.035	0.214	0.041-1.115	0.067	0.346	0.120-0.997	0.049	0.284	0.089-0.902	0.033

OLZ olanzapine, APZ aripiprazole, CI confidence interval, HR hazard ratio, CP chlorpromazine

Fully adjusted model: adjusted by sex, age at discharge, duration of illness, duration of hospitalization, baseline CP equivalent dose (mg/day), concurrent use of anticholinergic drugs, concurrent use of another antipsychotic for sleep (CP equivalent dose ≤25 mg)

na' denotes not available: no patient discontinued APZ due to intolerability.

OLZ low dose: 2.5-10 mg/day, high-dose: above 12.5-30 mg/day

APZ low dose: 3-15 mg/day, high-dose: above 18-30 mg/day