Abbreviated Novartis CTRD Template

Sponsor

Novartis Pharmaceuticals

Generic Drug Name

AQW051

Therapeutic Area of Trial

Schizophrenia

Investigational Indication

No approved indication. Trial was conducted in chronic stable adult schizophrenia patients.

Protocol Number

CAQW051A2202

Title

A single-dose, placebo-controlled, stratified, randomized, double-blind, crossover study to determine the pharmacodynamic effects of AQW051 followed by a 4-week multiple-dose, placebo-controlled, stratified, randomized, double-blind, parallel-group safety and tolerability study in people with chronic stable schizophrenia

Study Phase

Phase II

Study Start/End Dates

First patient enrolled: 29-Dec-2008

Last patient completed: 17-Nov-2011

Multiple dose safety, tolerability and exposure data in patients with schizophrenia were obtained from other trials with a primary focus on cognitive effects, making part 2 of the trial unnecessary.

Study Design/Methodology

This multi-center study in subjects with stable chronic schizophrenia had a two part design; however, only Part 1 was conducted. Part 1 was conducted at approximately 7 centers in the US. Part 1 employed a single dose, placebo-controlled, double-blind, randomized, two strata, three dose groups, two-period, cross-over design. The effect of three doses of AQW051 (7.5 mg, 50 mg, 100 mg) on task-related brain activation (BOLD response) in key brain areas during the performance of working memory, episodic memory and visual activation task was evaluated in 72 subjects (24 subjects per dose group).

Centers

7 centers in USA

Publication

None

Outcome Measures

Primary: To assess the enhancement of task-related brain activation (BOLD response) in key brain areas in schizophrenia during the performance of working memory, episodic memory and visual activation task as measured by functional magnetic resonance imaging (fMRI) in people with schizophrenia.

Secondary: To assess the effects of a single dose of AQW051 on performance of working and episodic memory tasks in people with schizophrenia.

To determine the relationship of exposure to brain activation after a single dose of AQW051 in people with schizophrenia.

Exploratory: To perform exploratory pharmacogenetic assessments to examine whether individual genetic variation in genes relating to drug metabolism, schizophrenia, and the drug target pathway confer differential response to AQW051

Test Product (s), Dose(s), and Mode(s) of Administration

Part I: Single-dose 2-period crossover design trial; each subject will complete one period with one active AQW051 dose of 7.5, 50, or 100 mg followed by at least a 10 day washout period and another period with a placebo dose.

Study drug and strength

AQW051 0.5 mg Oral Capsule

AQW051 5 mg Oral Capsule

AQW051 25 mg Oral Capsule

Placebo Oral Capsule

Statistical Methods

The primary analysis of fMRI data was based on the BOLD response variables within the EMT, WMT and VAT. The BOLD response of primary interest for EMT was the average of the corresponding contrast across the 2 runs within the encoding and retrieving phase, for WMT the average of the corresponding contrast across the 2 runs for the change from “0-back” to “2-back” condition and for VAT the change from the fixation to the visual activation task.

The BOLD signal responses were analyzed, separately for each primary region of interest, by means of a mixed effect model adjusted for stratum (smoking status), sequence, treatment, and period as fixed effects, and for subject as a random effect. The mean pair-wise treatment differences (between each AWQ051 dose and placebo and between AWQ051 doses) in BOLD response and their 95% CI were obtained from the model as well as the statistical significance of the differences.

In order to further interpret the clinical relevance of a notable mean increase versus placebo, its normalized increase (“effect size”) was calculated.

In order to reduce the overall type I error caused by the presence of 7 co-primary endpoints and 3 AQW051 doses, the activity of AQW051 was based on the presence of either a moderate effect size (i.e., an effect size of at least 0.4 units) in at least 2 of the 3 regions of interest for WMT or of the 4 regions of interest for EMT, or of a strong effect size (i.e., an effect size of at least 0.7 units) in at least 1 of the 7 regions of interest.

Secondary analyses included within stratum (smoking level) analyses, fMRI variables obtained from detecting areas of activation, BOLD responses averaged in each secondary region of interest, and analyses within smokers assessing heavy vs light smokers.

All data were summarized using descriptive statistics.

Study Population: Inclusion/Exclusion Criteria and Demographics

Male and female stable schizophrenic subjects whom were diagnosed with schizophrenia according to the Diagnostic and Statistical Manual of Mental Disorders IV (DSM-IV/DSM-IV-TR). Subjects whom are being treated with a stable regimen of one or more of the following second generation antipsychotics: olanzapine, risperidone, paliperidone, quetiapine, ziprasidone, aripiprazole.

Participant Flow

	Low dose cohort			Mid dose cohort			High dose cohort			
	Seq. A N=12 n(%)	Seq. B N=10 n(%)	Overall N=22 n(%)	Seq. C N=12 n(%)	Seq. D N=12 n(%)	Overall N=24 n(%)	Seq. E N=11 n(%)	Seq. F N=11 n(%)	Overall N=22 n(%)	Total N=68 n(%)
Patients										
Completed	9 (75.0)	10 (100.0)	19 (86.4)	11 (91.7)	11 (91.7)	22 (91.7)	10 (90.9)	9 (81.8)	19 (86.4)	60 (88.2)
Discontinued	3 (25.0)		3 (13.6)	1 (8.3)	1 (8.3)	2 (8.3)	1 (9.1)	2 (18.2)	3 (13.6)	8 (11.8)
Adverse Event(s)	2 (16.7)		2 (9.1)					1 (9.1)	1 (4.5)	3 (4.4)
Lost to follow-up								1 (9.1)	1 (4.5)	1 (1.5)
Administrative problems					1 (8.3)	1 (4.2)				1 (1.5)
Protocol deviation	1 (8.3)		1 (4.5)	1 (8.3)		1 (4.2)	1 (9.1)		1 (4.5)	3 (4.4)

Seq. A = AQW051 7.5mg SD / Placebo; Seq. B = Placebo / AQW051 7.5mg SD;
Seq. C = AQW051 50mg SD / Placebo; Seq. D = Placebo / AQW051 50mg SD;
Seq. E = AQW051 100mg SD / Placebo; Seq. F = Placebo / AQW051 100mg SD.

Baseline Characteristics Subjects enrolled were stable schizophrenics with the following demographic characteristics: Gender - Male (51) or Female (17), Race - Caucasian (32) or Black (32) or Asian (3) or other (1); Non-smokers(39) or smoker (29) with average age of 41 years old and average BMI of approximately 30.

		Low dose cohort			Mid dose cohort		
		Seq. A N=12	Seq. B N=10	Overall N=22	Seq. C N=12	Seq. D N=12	Overall N=24
Age (years)	Mean (SD)	39.3 (11.06)	46.8 (8.57)	42.7 (10.49)	40.3 (7.24)	39.8 (11.49)	40.1 (9.39)
Height (cm)	Mean (SD)	173.1 (8.01)	170.3 (10.67)	171.8 (9.18)	174.1 (12.16)	174.9 (8.90)	174.5 (10.43)
Weight (kg)	Mean (SD)	92.22 (21.195)	87.14 (15.790)	89.91 (18.678)	93.33 (23.450)	91.50 (20.809)	92.42 (21.701)
BMI (kg/m2)	Mean (SD)	31.165 (9.1522)	30.209 (5.6688)	30.730 (7.6082)	30.685 (6.3054)	29.834 (5.9904)	30.260 (6.0304)
Gender - n(%)	Male	9 (75.0%)	8 (80.0%)	17 (77.3%)	8 (66.7%)	9 (75.0%)	17 (70.8%)
	Female	3 (25.0%)	2 (20.0%)	5 (22.7%)	4 (33.3%)	3 (25.0%)	7 (29.2%)
Race - n(%)	Caucasian	4 (33.3%)	3 (30.0%)	7 (31.8%)	6 (50.0%)	10 (83.3%)	16 (66.7%)
	Black	7 (58.3%)	5 (50.0%)	12 (54.5%)	6 (50.0%)	2 (16.7%)	8 (33.3%)
	Asian	1 (8.3%)	2 (20.0%)	3 (13.6%)	0 (0.0 %)	0 (0.0 %)	0 (0.0 %)
	Other	0 (0.0 %)	0 (0.0 %)	0 (0.0 %)	0 (0.0 %)	0 (0.0 %)	0 (0.0 %)
Ethnicity - n(%)	Hispanic/Latino	0 (0.0 %)	0 (0.0 %)	0 (0.0 %)	0 (0.0 %)	2 (16.7%)	2 (8.3%)
	Indian (India subc)	0 (0.0 %)	0 (0.0 %)	0 (0.0 %)	0 (0.0 %)	0 (0.0 %)	0 (0.0 %)
	Mixed ethnicity	0 (0.0 %)	1 (10.0%)	1 (4.5%)	1 (8.3%)	0 (0.0 %)	1 (4.2%)
	Other	12 (100.0%)	9 (90.0%)	21 (95.5%)	11 (91.7%)	10 (83.3%)	21 (87.5%)
Smoking Status - n(%)	Non Smokers	7 (58.3%)	5 (50.0%)	12 (54.5%)	7 (58.3%)	7 (58.3%)	14 (58.3%)
	Smokers	5 (41.7%)	5 (50.0%)	10 (45.5%)	5 (41.7%)	5 (41.7%)	10 (41.7%)
	Light smokers	3 (25.0%)	2 (20.0%)	5 (22.7%)	3 (25.0%)	4 (33.3%)	7 (29.2%)
	Heavy smokers	2 (16.7%)	2 (20.0%)	4 (18.2%)	2 (16.7%)	1 (8.3%)	3 (12.5%)

Seq. A = AQW051 7.5mg SD / Placebo; Seq. B = Placebo / AQW051 7.5mg SD; Seq. C = AQW051 50mg SD / Placebo; Seq. D = Placebo / AQW051 50mg SD; Seq. E = AQW051 100mg SD / Placebo; Seq. F = Placebo / AQW051 100mg SD.

		High dose cohort			
		Seq. E N=11	Seq. F N=11	Overall N=22	Total N=68
Age (years)	Mean (SD)	42.7 (10.90)	41.0 (12.56)	41.9 (11.51)	41.5 (10.37)
Height (cm)	Mean (SD)	175.7 (5.50)	172.5 (9.28)	174.1 (7.63)	173.5 (9.13)
Weight (kg)	Mean (SD)	93.18 (22.100)	94.42 (15.173)	93.80 (18.510)	92.05 (19.518)
BMI (kg/m2)	Mean (SD)	30.336 (7.8390)	32.022 (6.6260)	31.179 (7.1354)	30.709 (6.8359)
Gender - n(%)	Male	9 (81.8%)	8 (72.7%)	17 (77.3%)	51 (75.0%)
	Female	2 (18.2%)	3 (27.3%)	5 (22.7%)	17 (25.0%)
Race - n(%)	Caucasian	7 (63.6%)	2 (18.2%)	9 (40.9%)	32 (47.1%)
	Black	4 (36.4%)	8 (72.7%)	12 (54.5%)	32 (47.1%)
	Asian	0 (0.0 %)	0 (0.0 %)	0 (0.0 %)	3 (4.4%)
	Other	0 (0.0 %)	1 (9.1%)	1 (4.5%)	1 (1.5%)
Ethnicity - n(%)	Hispanic/Latino	0 (0.0 %)	3 (27.3%)	3 (13.6%)	5 (7.4%)
	Indian (India subc)	1 (9.1%)	0 (0.0 %)	1 (4.5%)	1 (1.5%)
	Mixed ethnicity	1 (9.1%)	1 (9.1%)	2 (9.1%)	4 (5.9%)
	Other	9 (81.8%)	7 (63.6%)	16 (72.7%)	58 (85.3%)
Smoking Status - n(%)	Non Smokers	6 (54.5%)	7 (63.6%)	13 (59.1%)	39 (57.4%)
	Smokers	5 (45.5%)	4 (36.4%)	9 (40.9%)	29 (42.6%)
	Light smokers	1 (9.1%)	1 (9.1%)	2 (9.1%)	14 (20.6%)
	Heavy smokers	3 (27.3%)	2 (18.2%)	5 (22.7%)	12 (17.6%)

Seq. A = AQW051 7.5mg SD / Placebo; Seq. B = Placebo / AQW051 7.5mg SD; Seq. C = AQW051 50mg SD / Placebo; Seq. D = Placebo / AQW051 50mg SD; Seq. E = AQW051 100mg SD / Placebo; Seq. F = Placebo / AQW051 100mg SD.
Source: Post-text table 14.1-3.1.1

Safety Results

Adverse Events by System Organ Class

	Low dose cohort			Mid dose cohort			High dose cohort		
	AQW051 7.5mg N=22 n (%)	Placebo N=19 n (%)	Overall N=22 n (%)	AQW051 50mg N=23 n (%)	Placebo N=23 n (%)	Overall N=24 n (%)	AQW051 100mg N=20 n (%)	Placebo N=22 n (%)	Overall N=22 n (%)
Patients with AE(s)	8 (36.4%)	9 (47.4%)	15 (68.2%)	10 (43.5%)	8 (34.8%)	13 (54.2%)	9 (45.0%)	11 (50.0%)	13 (59.1%)
System organ class									
Gastrointestinal disorders	4 (18.2%)	3 (15.8%)	7 (31.8%)	5 (21.7%)	1 (4.3%)	6 (25.0%)	2 (10.0%)	3 (13.6%)	5 (22.7%)
Nervous system disorders	3 (13.6%)	2 (10.5%)	4 (18.2%)	5 (21.7%)	5 (21.7%)	7 (29.2%)	1 (5.0%)	7 (31.8%)	7 (31.8%)
Psychiatric disorders	2 (9.1%)	2 (10.5%)	4 (18.2%)	3 (13.0%)	3 (13.0%)	5 (20.8%)	2 (10.0%)	2 (9.1%)	4 (18.2%)
Musculoskeletal and connective tissue disorders	2 (9.1%)	1 (5.3%)	3 (13.6%)	0 (0.0%)	2 (8.7%)	2 (8.3%)	1 (5.0%)	1 (4.5%)	2 (9.1%)
Respiratory, thoracic and mediastinal disorders	2 (9.1%)	0 (0.0%)	2 (9.1%)	1 (4.3%)	2 (8.7%)	3 (12.5%)	1 (5.0%)	0 (0.0%)	1 (4.5%)
Eye disorders	0 (0.0%)	2 (10.5%)	2 (9.1%)	2 (8.7%)	0 (0.0%)	2 (8.3%)	1 (5.0%)	0 (0.0%)	1 (4.5%)
General disorders and administration site conditions	1 (4.5%)	0 (0.0%)	1 (4.5%)	1 (4.3%)	0 (0.0%)	1 (4.2%)	0 (0.0%)	1 (4.5%)	1 (4.5%)
Injury, poisoning and procedural complications	0 (0.0%)	1 (5.3%)	1 (4.5%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (5.0%)	1 (4.5%)	2 (9.1%)
Skin and subcutaneous tissue disorders	1 (4.5%)	0 (0.0%)	1 (4.5%)	1 (4.3%)	0 (0.0%)	1 (4.2%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Vascular disorders	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (4.3%)	0 (0.0%)	1 (4.2%)	1 (5.0%)	1 (4.5%)	1 (4.5%)
Cardiac disorders	0 (0.0%)	1 (5.3%)	1 (4.5%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Investigations	1 (4.5%)	0 (0.0%)	1 (4.5%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Metabolism and nutrition disorders	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (5.0%)	1 (4.5%)	1 (4.5%)
Renal and urinary disorders	0 (0.0%)	1 (5.3%)	1 (4.5%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Reproductive system and breast disorders	1 (4.5%)	0 (0.0%)	1 (4.5%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)

Arranged in descending order of total frequency

AQW051 administered in a single dose of 7.5, 50, or 100mg was safe and well tolerated.

Summary of Adverse Events

Serious Adverse Events and Deaths

	AQW051			Placebo
	7.5 mg/kg N=22	50 mg/kg N=24	100 mg/kg N=22	N=68
Patients with serious or significant AEs	n (%)	n (%)	n (%)	n (%)
Death	0	0	0	0
SAEs	1 (4.5)	0	0	0
Discontinued due to AEs	1 (4.5)	0	1 (4.5)	0
Discontinued due to SAEs	1 (4.5)	0	0	0
Discontinued due to non-serious AEs	0	0	0	0

Other Relevant Findings

Summary of the analysis primary (fMRI) analysis (Fixed area ROI) – All Subjects

		AQW7.5 mg - Placebo		AQW50 mg - Placebo		AQW100 mg - Placebo	
	ROI	Effect size*	95% CI	Effect size*	95% CI	Effect size*	95% CI
EMT (E)	A	0.795	(0.228, 1.362)	-0.001	(-0.523, 0.521)	-0.228	(-0.793, 0.337)
	B	0.476	(-0.057, 1.010)	0.004	(-0.485, 0.493)	-0.178	(-0.709, 0.354)
	C	0.214	(-0.432, 0.860)	0.217	(-0.389, 0.822)	0.187	(-0.461, 0.836)
	D	0.186	(-0.363, 0.734)	0.044	(-0.461, 0.548)	-0.240	(-0.786, 0.307)
WMT	E	0.010	(-0.558, 0.579)	0.059	(-0.473, 0.590)	-0.064	(-0.628, 0.500)
	F	-0.165	(-0.693, 0.363)	0.163	(-0.330, 0.656)	0.431	(-0.093, 0.955)
	G	-0.121	(-0.664, 0.422)	0.085	(-0.422, 0.592)	-0.047	(-0.585, 0.492)
EMT (R)	H	-0.211	(-0.703, 0.282)	-0.326	(-0.785, 0.134)	-0.396	(-0.910, 0.118)
	I	-0.117	(-0.618, 0.384)	0.140	(-0.328, 0.607)	-0.151	(-0.674, 0.373)
	J	-0.477	(-0.941, -0.012)	-0.030	(-0.463, 0.402)	-0.197	(-0.683, 0.289)
	K	-0.068	(-0.609, 0.474)	-0.081	(-0.587, 0.425)	-0.240	(-0.804, 0.324)
Mod effect?**		Y		N		N	
Strong effect?**		Y		N		N	

*: Normalised effect size; **: Mod effect >=0.4 in 2 or more ROI for either EMT(E) or WMT; Strong effect if effect >= 0.7 in 1 or more ROI (A-G)
ROI: A=Hippo ante (enc); B=Hippo post (enc); C=Parahippo gyrus ante (enc); D=Parahippo gyrus post (enc); E=Dorsolateral PFC; F=Inferior PFC; G=Dorsalpariet cortex; H=Hippo ante (ret hits); I=Hippo post (ret hits); J=Parahippo gyrus ante (ret hits); K=Parahippo gyrus post (ret hits)

Summary of the analysis primary (fMRI) analysis (Fixed area ROI) - Non-Smokers

		AQW7.5 mg - Placebo		AQW50 mg - Placebo		AQW100 mg - Placebo	
	ROI	Effect size*	95% CI	Effect size*	95% CI	Effect size*	95% CI
EMT (E)	A	0.830	(0.126, 1.533)	0.112	(-0.544, 0.767)	-0.313	(-0.998, 0.372)
	B	0.744	(0.077, 1.411)	-0.006	(-0.626, 0.615)	-0.207	(-0.856, 0.441)
	C	0.077	(-0.720, 0.873)	0.257	(-0.488, 1.002)	0.263	(-0.516, 1.042)
	D	0.319	(-0.368, 1.007)	0.080	(-0.560, 0.721)	-0.406	(-1.075, 0.262)
WMT	E	0.043	(-0.659, 0.745)	0.325	(-0.329, 0.979)	0.212	(-0.471, 0.896)
	F	-0.199	(-0.836, 0.437)	0.512	(-0.078, 1.103)	0.925	(0.308, 1.542)
	G	-0.309	(-0.982, 0.364)	0.301	(-0.325, 0.927)	0.204	(-0.450, 0.858)
EMT (R)	H	-0.398	(-1.035, 0.239)	-0.273	(-0.865, 0.319)	-0.314	(-0.960, 0.332)
	I	-0.104	(-0.744, 0.536)	0.018	(-0.577, 0.613)	-0.051	(-0.700, 0.599)
	J	-0.620	(-1.224, -0.015)	0.124	(-0.437, 0.684)	-0.165	(-0.777, 0.447)
	K	0.038	(-0.646, 0.721)	0.055	(-0.581, 0.691)	-0.022	(-0.716, 0.672)
Mod effect?**		Y		N		N	
Strong effect?**		Y		N		Y	

*: Normalised effect size; **: Mod effect >=0.4 in 2 or more ROI for either EMT(E) or WMT; Strong effect if effect >= 0.7 in 1 or more ROI (A-G)
ROI: A=Hippo ante (enc); B=Hippo post (enc); C=Parahippo gyrus ante (enc); D=Parahippo gyrus post (enc); E=Dorsolateral PFC; F=Inferior PFC; G=Dorsalpariet cortex; H=Hippo ante (ret hits); I=Hippo post (ret hits); J=Parahippo gyrus ante (ret hits); K=Parahippo gyrus post (ret hits)

Summary of the analysis primary (fMRI) analysis (Fixed area ROI) - Smokers

		AQW7.5 mg - Placebo		AQW50 mg - Placebo		AQW100 mg - Placebo	
	ROI	Effect size*	95%CI	Effect size*	95%CI	Effect size*	95%CI
EMT (E)	A	0.727	(-0.076, 1.530)	-0.152	(-0.901, 0.597)	-0.097	(-0.924, 0.731)
	B	0.103	(-0.663, 0.868)	0.015	(-0.695, 0.725)	-0.137	(-0.929, 0.655)
	C	0.376	(-0.488, 1.240)	0.157	(-0.689, 1.004)	0.074	(-0.836, 0.984)
	D	-0.002	(-0.789, 0.785)	-0.006	(-0.738, 0.726)	0.016	(-0.796, 0.828)
WMT	E	-0.031	(-0.799, 0.736)	-0.307	(-1.054, 0.440)	-0.465	(-1.250, 0.320)
	F	-0.131	(-0.829, 0.568)	-0.312	(-0.989, 0.364)	-0.263	(-0.983, 0.457)
	G	0.111	(-0.626, 0.848)	-0.211	(-0.927, 0.505)	-0.405	(-1.161, 0.352)
EMT (R)	H	0.021	(-0.679, 0.720)	-0.390	(-1.068, 0.288)	-0.512	(-1.276, 0.253)
	I	-0.130	(-0.833, 0.573)	0.298	(-0.383, 0.980)	-0.290	(-1.059, 0.478)
	J	-0.299	(-0.964, 0.366)	-0.236	(-0.879, 0.407)	-0.247	(-0.978, 0.484)
	K	-0.198	(-0.946, 0.551)	-0.270	(-0.997, 0.458)	-0.555	(-1.366, 0.257)
Mod effect?**		N		N		N	
Strong effect?**		Y		N		N	

*: Normalised effect size; **: Mod effect >=0.4 in 2 or more ROI for either EMT(E) or WMT; Strong effect if effect >=0.7 in 1 or more ROI (A-G)
ROI: A=Hippo ante (enc); B=Hippo post (enc); C=Parahippo gyrus ante (enc); D=Parahippo gyrus post (enc); E=Dorsolateral PFC; F=Inferior PFC; G=Dorsalpariet cortex; H=Hippo ante (ret hits); I=Hippo post (ret hits); J=Parahippo gyrus ante (ret hits); K=Parahippo gyrus post (ret hits)

fMRI signals were robustly detected in the pre-specified regions under placebo conditions in the WMT and EMT tasks. Both the 7.5 mg and 100 mg dose level showed moderate or strong effects according to the pre-specified protocol analysis. A consistent effect of AQW051 across the regions pre-specified to be involved in the tasks was not observed. Generally similar effects were seen in both smokers and non-smokers. Subject memory task performance at baseline was good as measured by the d-prime parameter. No effects of AQW051 on d-prime were detected.

A decrease (improvement) in response time in the memory tasks was observed on treatment with AQW051 at the 50 mg dose level.

A consistent relation of AQW051 exposure to BOLD fMRI signals was not observed.

Plasma peak concentrations (Cmax in ng/mL) of AQW051 in patients with schizophrenia following a single administration

Dose	All (N = 19-22)		Smokers (N= 9-10)		Non-smokers (N = 9-13)	
	Mean	SD	Mean	SD	Mean	SD
7.5 mg	2.19	0.74	2.14	0.776	2.25	0.748
50 mg	16.5	4.79	16.8	3.42	16.2	5.68
100 mg	33.6	11.1	28.9	9.01	37.5	11.6

Plasma peak levels determined in this study indicated a good compliance to the treatment since AQW051 concentrations were in the range expected for the chosen dose levels. The absence of a major effect of smoking on the pharmacokinetics of AQW051 was confirmed.

Date of Clinical Trial Report

09-Nov-2012

Date Inclusion on Novartis Clinical Trial Results Database

18 NOV 2013

Date of Latest Update