

**Table 1: Schedule of Activities**

Study Procedures	Screening <sup>a</sup>		C-I <sup>b</sup>																			UNS <sup>d</sup>	EOS or ET <sup>e</sup>		
	Screening		C-I		Inpatient Period 1							OP <sup>c</sup>		Inpatient Period 2									EOS Day 54+/-2		
Days	-42 to -9	-21	-8	-7	-6 through -5	-4 through -1	1	2-3	4-7	8	9	10-22	23	24	25	26-28	29	30-35	36	37-38	39	40			
<b>Eligibility</b>																									
Informed consent	X																								
Admit to unit			X										X												
Discharge from unit <sup>f</sup>											X												X		
Outpatient visit or phone call												X <sup>g</sup>													
Inclusion/exclusion	X		X				X																		
Discuss/document contraception	X		X								X														X
Follicle-stimulating hormone (post-menopausal females only <sup>h</sup> )	X																								
Alcohol test	X		X																						
Urine drug screen	X		X																						
HIV, hepatitis B and C screen	X																								
<b>Study Administration</b>																									
Medical history/demographics <sup>i</sup>	X																								
WD history <sup>j</sup>	X																								
Prior WD treatment <sup>k</sup>	X							X																	
Physical examination <sup>k</sup>	X		X										X												X
Height <sup>l</sup> , weight, and BMI	X		X										X										X		
<b>Enrollment</b>																									
Enrollment/inclusion				X																					
Discontinue chelation therapy								X																	▶
Discontinue zinc therapy		X																							▶
<b>Administration of Study Intervention<sup>m</sup></b>																									
ALXN1840 15 mg/day								X	X	X	X	X	X	X	X	X									
ALXN1840 30 mg/day																		X	X	X	X	X			
Study intervention compliance												X <sup>n</sup>	X												
<b>PK/PD Analyses<sup>o</sup></b>																									
Blood sampling for PK: Plasma total Mo and PUF-Mo								X <sup>p</sup>	X						X <sup>p</sup>	X	X <sup>p</sup>	X	X	X	X	X <sup>p</sup>	X		
PD: Plasma total and PUF-Cu, LBC, ceruloplasmin, ceruloplasmin-bound Cu																									
<b>Safety Assessments / Laboratory Analyses</b>																									
Chemistry <sup>q</sup> , hematology, Coagulation	X		X			X <sup>r</sup>				X		X <sup>s</sup>	X			X <sup>r</sup>	X					X			X
Urinalysis	X		X							X		X <sup>s</sup>	X			X						X			X
Urine/serum pregnancy test <sup>s</sup>	X		X										X												X
Retained serum sample (safety) <sup>t</sup>				X																					
Vitals sign measurements <sup>u</sup>	X		X				X			X		X											X		X
12-lead ECG (triplicate)	X		X				X			X		X										X			X
Adverse events	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<b>Balance assessments</b>																									
Cu/Mo-controlled meals <sup>v</sup>			X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	X	
Light exercise regimen			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Urination and bowel movement monitoring, menstruation check <sup>w</sup>						X	X	X	X	X					X	X	X	X	X	X	X	X	X		
24-hour urine for Cu and Mo <sup>w</sup>						X	X	X	X	X					X	X	X	X	X	X	X	X			
Feces for Cu and Mo <sup>x</sup>						X	X	X	X	X					X	X	X	X	X	X	X	X			
<b>Other</b>																									
Concomitant medication and non-pharmacologic therapy/procedure	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X

<sup>a</sup> Within 42 days of ALXN1840 administration. Details of procedures that may be performed by sites designated as “screening sites” (only in the US) are detailed in Section 8.

<sup>b</sup> Participants will be admitted to the clinical research unit (CRU) at least 10 hours prior to enrollment and initiation of copper- and molybdenum-controlled diet.

<sup>c</sup> At the CRU’s discretion, participants may remain in the CRU or be readmitted on Day 22 with all procedures starting on Day 23.

<sup>d</sup> Unscheduled study visits may occur at any time during the study and may include any study procedure as deemed necessary by the Investigator.

<sup>e</sup> Participants are required to return to the CRU Day 54+/-2; participants will be discontinued from ALXN1840 medication by their physician at the latest by the Day 54 follow-up.

<sup>f</sup> Discharge from the unit may occur after completion of all procedures on Day 9 and on Day 40 and after the Investigator has reviewed all safety assessment (including safety laboratory tests) and confirmed that the participant is appropriate for discharge.

<sup>g</sup> A single outpatient visit or phone call and safety laboratory assessment should occur between Day 14 and Day 18. A phone call may take place on a different day than the blood draw within the Day 14 through Day 18 period.

<sup>h</sup> If needed to confirm menopause.

<sup>i</sup> Parameters include age and sex. Race and ethnicity will be collected where permitted by local regulations.

<sup>j</sup> Wilson disease history will include diagnosis date, method of diagnosis, history of cirrhosis, details of any previous liver biopsies performed, and treatment received.

<sup>k</sup> A full physical examination will be performed at Screening, at check-in for the study, and at the End of the study/Early Termination Visit. A physical examination should also be performed on any participants with ongoing adverse events prior to discharge from the unit. Otherwise, a symptom-driven physical examination may be performed at other times, at the Principal Investigator’s discretion.

<sup>l</sup> Height at screening only.

<sup>m</sup> While in the CRU, study intervention will be administered after an overnight fast (ie, at least 10 hours) at the same time every morning; drug is to be administered with 240 mL of water and meals should be delayed a minimum of 2 hours after dosing. As an outpatient, participants are expected to take ALXN1840 at approximately the same time daily (+/-1 hour). Participants should take the medication with a glass of water on an empty stomach; meals should be delayed a minimum of 2 hours after dosing.

<sup>n</sup> During the outpatient period, participants will use SMS text messaging to confirm study intervention administration.

<sup>o</sup> Blood sampling for PK/PD will occur before ALXN1840 administration and represents a predose trough. See Table 2 for PK/PD sampling on Days 1, 25, 29, and 39.

<sup>p</sup> PK/PD collection will include timepoints described in the schedule of PK/PD assessment for Days 1, 25, 29, and 39 (Table 2).

<sup>q</sup> Samples for serum chemistry will be obtained following a fast of at least 8 hours at the Screening Visit and at check-in. In case of rechecks, and postdose serum chemistry, participants may not have fasted for 6 or 8 hours before the serum chemistry sample is taken.

<sup>r</sup> Laboratory assessment including chemistry, hematology, and coagulation parameters should be performed on Days -8, -1, 8, 23, and 28 only.

<sup>s</sup> Menstruation check is for women only; women of childbearing potential should only be enrolled after a negative serum pregnancy test result at Screening. Additional urine pregnancy testing will be standard for the protocol unless serum testing is required by site policies, local regulation, or Institutional Review Boards (IRBs)/Independent Ethics Committees (IECs) (Section 10.2). In addition to pregnancy tests detailed at the visits in the SoA, females of childbearing potential will be required to perform urine pregnancy tests at least every 4 weeks at their home or the study site throughout their time in the study.

<sup>t</sup> A single 15 mL serum sample will be retained for evaluation in the event of an unexpected safety finding; retained samples may be destroyed after completion of the clinical study report.

<sup>u</sup> Vital signs measurements and ECGs should be performed predose, unless otherwise specified. Vital signs include body temperature, heart rate, respiratory rate, and systolic and diastolic blood pressure.

<sup>v</sup> Copper- and molybdenum-controlled diet will be initiated after registration/inclusion. Participants will remain on a copper/molybdenum controlled diet throughout both the inpatient Period 1 (Day -8 to Day 9) and inpatient Period 2 (Day 23 to Day 40); during this time participants will be strongly encouraged to complete all meals. While not in the CRU, participants will be encouraged to adhere to their usual copper-controlled diet.

<sup>w</sup> For each input/output balance period, 24-hour urine samples are to be collected for measurement of copper and molybdenum.

<sup>x</sup> For fecal samples, each individual sample will be independently collected with record of date, time, and weight of the sample.

Abbreviations: AE = adverse event; BMI = body mass index; C-I = check-in; Cu = copper; D = day; ECG = electrocardiogram; EOS/ET = End of Study or Early Termination; HIV = human immunodeficiency virus; HR = heart rate; LBC = labile bound copper; Mo = molybdenum; OP = outpatient; PD = pharmacodynamic; PK = pharmacokinetics; PUF = plasma ultrafiltrate; UNS = unscheduled; WD = Wilson disease.

**Table 2: Schedule of Pharmacokinetic and Pharmacodynamic Assessments on Days 1, 25, 29, and 39**

Time point (hours) <sup>a</sup>	-0.5	0	1	2	3	4	5	6	8	12	24
Blood sampling for PK: Plasma total Mo and PUF-Mo		X									
PD: Plasma total and PUF-Cu, LBC, ceruloplasmin, ceruloplasmin-bound Cu				X		X	X	X	X	X	X <sup>b</sup>

Note: Windows for PK/PD time points will be defined as ±10% of the nominal time point. On Days 1 and 39, triplicate 12-lead ECG will be collected at 4 hours postdose. When multiple procedures are scheduled to occur at the same time, the following order of events should be strictly adhered to whenever possible: ECG, vital signs, blood sampling (eg, for PK/PD), study intervention administration, and meal.

<sup>a</sup> Time points are relative to dosing (0 hours).

<sup>b</sup> Hour 24 PK/PD sampling is to occur just prior to the next-day dose of ALXN1840.

Abbreviations: Cu = copper; LBC = labile bound copper; Mo = molybdenum; PD = pharmacodynamic;

PK = pharmacokinetic; PUF = plasma ultrafiltrate.