Developing Budgets for Research Projects Session Focus: Clinical Trials

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IP-101 STUDY SYNOPSIS

IP-101 is an open-label, randomized, parallel-group, active-controlled study to assess the efficacy and safety of IP-101 administered intravenously as treatment for increased seizure activity in an epilepsy monitoring unit (EMU) setting. The primary objective is to assess the efficacy of intravenous (IV) IP-101 compared to a standard dose of the standard of care rescue medication used in this EMU setting) in subjects with epilepsy undergoing EMU evaluation who experience seizures that require prompt treatment.

Subjects will be 18 to 64 years of age, will have an established diagnosis of epilepsy, and will be admitted to an institution's EMU for seizure characterization or noninvasive pre-surgical evaluation. Upon admission to the EMU, the subject will be randomly assigned (1:1:1) to receive a single iv dose of IP-101 100mg, IP-101 200mg, or the standard of care rescue medication, administered as appropriate for the weight of the patient.

The primary efficacy variable is time to next seizure per clinical observation with EEG confirmation or rescue medication. The secondary efficacy variables are proportion of subjects seizure-free per clinical observation at 6 hours, 8 hours, and 12 hours after the end of study drug administration, and proportion of subjects who receive rescue medication during the 6 hours, 8 hours, and 12 hours after the end of study drug administration.

Study drug administration will begin when the Investigator or designee determines by clinical observation and electroencephalogram (EEG) that a seizure requiring intervention (i.e., qualifying seizure) has started. The subject's seizure activity, by clinical observation and EEG, will be assessed over the next 12 hours following the end of study drug administration. In addition, the subject's cognitive impairment, vital signs, and electrocardiogram (ECG) will be measured at specified time points. If the subject's seizure activity does not stop after administration of study drug or seizure activity recurs, the subject may receive standard of care rescue medication at the Investigator's discretion.

Approximately 120 subjects will be enrolled in order to have 90 subjects (30 subjects per group) qualifying for primary analysis at up to 20 sites.

The other efficacy variable is time until seizure is resolved without additional intervention per clinical observation for those actively seizing at the end of study drug administration.

Safety variables are adverse events (AEs), assessment of cognitive impairment, vital signs, 12-lead electrocardiogram (ECG), and occurrence of repetitive seizures.

Schedule of IP-101 Study Procedures

Procedures	Screening Period (Day 1; includes consenting, planning EMU stay, randomization at the EMU admission, inpatient EMU time prior to the seizure qualifying for study drug administration)	Treatment Period (Day 1; start of study drug administration to 12h after end of study drug administration or until seizure or rescue medication)	Safety Follow-Up (24h after end of study drug administration)[a]
	Visit 1	Visit 2	Visit 3
	Upon Admission		
Informed consent	X		
Concomitant medications	X	X	X
Brief physical examination, including weight and height	X	X[c]	X[d]
Laboratory assessment (including urine dipstick or other confirmation)	X[e]	[e]	X
Cognitive Assessments	X	X[f]	
Vital signs (SBP, DBP, PR, RR)	X[e]	X[g]	X[g]
12-lead ECG	X	X[h]	X
Adverse Events	X	X	X
Randomization to study drug group	X		

DBP=diastolic blood pressure; ECG=electrocardiogram; EEG=electroencephalogram; EMU=Epilepsy Monitoring Unit;
IV=intravenous; PR=pulse rate; RR=respiratory rate; SBP=systolic blood pressure;
a Safety Follow-Up (SFU) assessments to be performed at least 24h after study drug administration.
b Medical history including psychiatric and substance abuse history.
c If the Screening physical examinations were performed within 7 days of Treatment Period, do not repeat.
d If any clinically significant abnormality observed after study drug administration, then perform at SFU.
e If subject has had laboratory assessments performed within the past 14 days, do not repeat.
f Assessment performed at Screening (Form 1), and at 1h (Form 2), 2h (Form 3), and 3h (Form 4) after the end of study drug administration. If study drug administration occurs for a nocturnal seizure and subject is asleep, assessment should not be performed.
g Assessments performed at the following time points: pre-dose, end of bolus, 5min, 15min, 30min, 1h, 2h, and 4h after end of bolus, unless seizure or rescue medication occurs that ends the Treatment Period. If clinically significant abnormality is observed in the final assessment of the Treatment Period, continue to monitor every 4h until resolution or end of SFU Period.
h Assessments will be performed within 60min of start of study drug administration, and a 5min continuous ECG will be performed beginning with the bolus start and stopping 2 to 5min after the end of the bolus.

IP-101 Study
Sample for SCORE 03.09.2017

				Time b/w admission and V2 varies, 2-5 days						
			Screening: Day -28 to -1		Day 1: study drug start to drug end + 12	Safety Follow-up: 24 hrs after study	Sponsor	Insurance		
Study Schedule	**Who?**	**Time/Cost**	**V1**		**V2**	**V3**	**Cost**	**Cost**	**Location**	**Comments**
Study Procedures			**Readmissio**	**Admission**						
Informed consent	SC	1	1.00							
Informed consent	PI	1	1.00							
Inclusion/exclusion	SC	0.5	0.50							
Concom meds	SC	1	1.00							
Brief physical exam: vitals	SC	0.25	0.25							
Brief physical exam: height/weight	SC	0.5	0.5							
Brief neuro exam	PI	0.5	0.50							
Urinalysis	SC	0.5				0.50				
Lab handling (local lab)	URMC	112.92				112.92	225.84			
Withdrawal criteria	SC	0.5		0.5	0.5					
Vital signs (SBP, DBP, PR, RR)	SC	0.5		0.50		2.00				
Vital signs (SBP, DBP, PR, RR)	RN	0.25			2.00					
12 lead ECG (tracing, interpret, report)	SC	0.5		0.5		0.5				
12 lead ECG (tracing)	RN	0.25			1					
12 lead ECG (interpret, report)	PI	0.25		0.25	0.50	0.25				
Adverse events	SC	0.25	0.25	0.25	0.25	0.25				
Overnight Facility Fee	NA	1850			1850.00	1850.00	3700.00			
Pharmacy prep and dispense	Pharm	79		79.00						
Cognitive assessment	SC	0.25			0.25	0.25				
Randomization to study drug group	SC	0.5		1.00						
Hotel stay for subject partner	NA									
CRF Completion	SC	1	1	1	1	1				
Query resolution	SC	0.5	0.5	0.5	0.5	0.5				
Patient Travel Reimbursement	NA	$53	53.00	53.00	0.00	0.00	106.00			
Study Personnel		Rate						Total Hours		
PI			1.50	0.25	0.50	0.25	$ 281.79	2.500		
SC			5.00	4.25	2.50	5.00	$ 547.27	16.750		
Nurses			-	-	3.00	-	$ 297.00	3.000		

Key
R = research related (billable to sponsor)
I = standard of care (to be paid by insurance)
N = provided free (not billable to sponsor or insurance)

Total Cost Per Participant $ 5,157.91

Estimated Number of Participants 6

Approved:

_____
Principal Investigator (Printed Name)

_____
Date

Section 2: Non-Participant Specific Costs	Indirect Rate		30%
Cost Description	**Cost**	**# of units**	**Total Cost**
Startup Costs			
Site Qualification Visit	973.64		$973.64
Prepare IRB Application/RSC	522.77		$522.77
Prepare Budget	130.69		$130.69
Contract Discussions	130.69		$130.69
Obtain and complete regulatory documentation	261.38		$261.38
Site Initiation Visit	486.82		$486.82
Initial training of site personnel	65.35		$65.35
Pharmacy set up	1500		$1,500.00
Startup Costs			**4071.33**
With Indirects			**5292.74**
Study Conduct Costs			
Recruitment of subjects *	436.17		$436.17
Screen failures - cost of procedures, items, tests *	112.92	0	$0.00
Screen failures - personnel time *	332.44		$332.44
Prepare and Attend monitoring visits	973.64		$973.64
Serious Adverse Events investigation and reporting	2,617.03		$2,617.03
Coordinate an updated consent form with RSRB	130.69		$130.69
Re-consent participant using updated consent form *	130.69		$130.69
Internal study team meetings	1,163.13		$1,163.13
Travel to study team meetings	-		$0.00
Attendance at study team teleconferences	-		$0.00
Consultant	-		$0.00
Biostatistics fee	-		$0.00
Dedicated phone or fax line	-		$0.00
Photocopying/ printing	0		$0.00
Advertising	0		$0.00
Pharmacy maintenance fee	1500	2	$3,000.00
Pharmacy dispensing fee (if not included in per patient	0	0	$0.00
Postage / Overnight courier	0		$0.00
Office supplies specifically attributable to the study	50		$50.00
Shipping supplies (i.e., dry ice)	0		$0.00
Subcontracts	0		$0.00
Equipment	0		$0.00
Study Conduct Costs			**8833.80**
With Indirects			**11483.93**
Study Closeout Costs			
Study Termination Visit	973.64		$973.64
Pharmacy Close Out fee	1,000.00		$1,000.00
Study Closeout Costs			**1973.64**
With Indirects			**2565.73**
Other Costs			
Record Storage	200		$200.00
FDA Audit	-		$0.00
	-		$0.00
Other Costs			**200.00**
With Indirects			**260.00**
Costs Excluded From Indirect Calculation			
RSRB and WIRB Initial Review	2470		$2,470.00
WIRB Close Out (Study close out + protocol close out)	420		$420.00
WIRB Continuing Review	1470	3	$4,410.00
WIRB Review - Changes to Research	675	2	$1,350.00
Costs Excluded From Indirect Calculation			**$8,650.00**

Non-Participant Grid

Investigator Hours	Investigator Cost	Coordinator Hours	Coordinator Cost	Other 1 Hours	Other 1 Cost	Other 2 Hours	Other 2 Cost
					-		-
4.00		16.00		-	-	-	-
-		16.00		-	-	-	-
-		4.00		-	-	-	-
-		4.00		-	-	-	-
-		8.00		-	-	-	-
2.00		8.00		-	-	-	-
-		2.00		-	-	-	-
-		-		-	-	-	-
3.00		3.00		-	-	-	-
-		-		-	-	-	-
1.50		5.00		-	-	-	-
4.00		16.00		-	-	-	-
18.00		18.00		-	-	-	-
-		4.00		-	-	-	-
-		4.00		-	-	-	-
8.00		8.00		-	-	-	-
-		-		-	-	-	-
-		-		-	-	-	-
-		-		-	-	-	-
-		-		-	-	-	-
-		-		-	-	-	-
-		-		-	-	-	-
-		-		-	-	-	-
-		-		-	-	-	-
-		-		-	-	-	-
-		-		-	-	-	-
-		-		-	-	-	-
-		-		-	-	-	-
-		-		-	-	-	-
4.00		16.00		-	-	-	-
-		-		-	-	-	-
-		-		-	-	-	-
-		-		-	-	-	-
-		-		-	-	-	-
-		-		-	-	-	-
-		-		-	-	-	-
-		-		-	-	-	-
-		-		-	-	-	-
-		-		-	-	-	-
TOT. 44.50		132.00		-	-	-	-

NOTES/COMMENTS

IP-101 Study

Sample for SCORE 03.09.2017

* Do not include this time/cost on the Budgeting Grid. Budgeting Grid only reflects time spent with enrolled participants.

Total Budget
Comparison of UR and Sponsor

IP-101 Study
Sample for SCORE 03.09.2017

			Raw UR Budget	Inflation Factor	Inflated UR Budget	Sponsor	Difference	NOTES:
Startup costs			5,292.74	-	5,292.74	6,500.00	1,207.26	$3,500 start up + $1,500 pharm start + IDC
Total Cost Per Participant		5,157.91				8,965.00		
Indirect Rate	30%	**Cost per Participant w/ Indirect** $ 6,705.28						
Total Estimated Participants		6.00				6.00		
Total estimated revenue from participant visits			40,231.66		40,231.66	53,790.00	13,558.34	
Separately Invoiceable Study Conduct Costs			11,483.93		11,483.93	3,900.00	(7,583.93)	Annual pharmacy maintenance x 2
Separately Invoiceable Study Closeout Costs			2,565.73		2,565.73	-	(2,565.73)	
Separately Invoiceable Other Costs			260.00		260.00	-	(260.00)	
IRB Costs			8,650.00		8,650.00	8,650.00	-	
Total Anticipated Costs			68,484.06		68,484.06	72,840.00	4,355.94	
							Surplus (Deficit)	
							6%	

Inflation Factors	
1 month - 12 months	0
13 months - 24 months	0.03
25 months - 36 months	0.0609
37 months - 48 months	0.0927
49 months - 60 months	0.1255
61 months - 72 months	0.1593

Approved:

Principal Investigator (Printed Name)	Principal Investigator (Signature)	/ / Date
ORPA Research Administrator (Printed Name)	ORPA Research Administrator (Signature)	/ / Date
Dean's Office (Printed Name)	Dean's Office (Signature)	/ / Date