

A Phase 1 Randomized, Double-blinded, Placebo-controlled Singleascending-dose Study of the Safety, Tolerability, and Pharmacokinetics of BIIB054 in Healthy Subjects and Subjects with Early Parkinson's Disease

Protocol number: 228HV101

Reminders for Key Screening and Day 1 Procedures

Screening Period

Brain MRI

References

- Protocol 228HV101
- MRI Acquisition Procedures Manual, Version 1

Preparation

• Ensure imaging site has been trained and calibrated equipment according to MRI Acquisition Procedures Manual, Version 1.

Timing

- Complete anytime between the screening visit and Day -1 BEFORE the lumbar puncture takes place on Day -1 to Day -2
- ~45 minutes 1 hour duration

Transfer

Send images to NeuroRx within 24 hours

Tip: **Sequences**

Brain MRI will include, at a minimum, these sequences:

- T1
- T2-FLAIR
- DWI
- Gradient echo
- DTI
- T1-weighted "neuromelanin"

SPECT with DATSCAN™

References

- Protocol 228HV101
- Technical Operations Manual (TOM), Version 1.0, 09-August-2016

 Since DATSCAN™ doses are commercially available, allot time for imaging center to order and receive doses

Timing

Inform patients that they should expect to be at the site 5-6hours for this procedure:

DATSCANTM dose administered

Patients wait \sim 3.5 - 4.5 hours for dose to take effect

 $\sim 30 - 45$ minutes imaging

· Send images to MNI within 24 hours

24 - 48 hours before IV infusion

MDS-UPDRS

Reference

• Protocol 228HV101

Rater

 Must be trained within 1 year prior to site initiation

Timing

 Anywhere from 25 – 40 minutes duration

Scheduling LP

Time of day of all LP CSF procedures throughout the study should match (± 1 hour). Choose time of day of this first LP CSF procedure with this in mind and discuss with subject prior to first LP.

Lumbar puncture (LP)

References

- Protocol 228HV101
- CSF Sample Collection, Processing, and Shipping Instructions, Version 5.0, 03-August-2016

Preparation

- Allot 20 minutes to prepare the patients for LB CSF
- Prepare materials, including logs and aliquot cryovials, according to CSF Sample Collection, Processing, and Shipping Instructions

Transportation

Due to the potential side effects after an LP CSF, such as headache, recommend to subjects that they may wish to be picked up at the site by a friend or family member.

Tip:

Timing

On Day -1 to Day -2 AFTER baseline MRI Inform patients that they should expect to be at the site 1.5 – 2 hours for this procedure:

~20 minutes LP preparation, including local anesthetic

~10 minutes for LP CSF

~1 hour subject observation period

Day 1: IV infusion

References

Protocol 228HV101

Continuous Monitoring

- Cardiac
- · Adverse reactions

Timing

Assessments completed throughout Day 1 (Dosing Day) after dosing

≤ 10 minutes

Assessments at this check-in point:

- 12-lead ECG
- Vital signs
- · Serum for PK sampling

30 minutes ± 5 minutes

Assessments at this check-in point:

- · Plasma for biomarkers
- Vital signs
- · Serum for PK sampling

1 hour ± 15 minutes

Assessment at this check-in point:

Serum for PK sampling

2 hours ± 15 minutes

Assessments at this check-in point:

- Plasma for biomarkers
- · Serum for PK sampling

4 hours ± 15 minutes

Assessments at this check-in point:

- · Serum for PK sampling
- Vital signs
- 12-lead ECG

8 hours ± 15 minutes

Assessments at this check-in point:

- Plasma and urine for biomarkers Urinalysis
- Hematology and clinical chemistry
- · Serum for PK sampling

12 hours ± 30 minutes

Assessments at this check-in point:

- · Serum for PK sampling
- Vital signs
- 12-lead ECG