Clinical Trials Information #46

Principal Investigator  Mona Al Mukaddam, MD, MS

Study Title:  A Phase 2, two-part, placebo-controlled, parallel-group, double-blind study to assess the efficacy and safety of 2 dosage regimens of oral IPN60130 for the treatment of fibrodysplasia ossificans progressiva in male and female participants 5 years of age and older (FALKON)

Purpose:  Treatment

Brief Description  Fibrodysplasia Ossificans Progressiva (FOP) is a rare, severely disabling disease characterized by the presence of bone in soft tissue where bone normally does not exist, known as Heterotopic Ossification (HO). It is often associated with painful, recurrent episodes of soft tissue swelling (flare-ups) that lead to abnormal stiffening and immobility (ankyloses) of major joints with cumulative and irreversible loss of movement and disability.

This study will evaluate the efficacy of 2 dosing regimens of IPN60130 in inhibiting new HO volume compared with placebo (a dummy treatment) in adult and paediatric participants with FOP. It will be assessed by a scan (provides internal images of the body) called low dose Whole Body Computed Tomography (WBCT), excluding head.

Adults and participants 15 years of age or older are also eligible for a sub study to evaluate HO lesions assessed by another type of scan, Fluorine-18-labelled natrium fluoride Positron Emission Tomography-Computed Tomography ([18F]NaF PET-CT).

Eligibility  
Key Inclusion Criteria:  Written, signed, and dated informed subject/parent consent; and for subjects who are minors, age-appropriate assent (performed according to local regulations). Participants must be clinically diagnosed with FOP, with the R206H ACVR1 mutation or other FOP variants associated with progressive HO. Participants must have disease progression in the preceding year of the screening visit. Participants who have participated in a prior clinical study using another investigational product for the treatment of FOP may be enrolled after a washout of at least 5 half-lives of the other investigational product. Participants with prior treatment such as, but not limited to, imatinib, isotretinoin, garetosmab or palovarotene may be enrolled 30 days after discontinuation or after washout of at least 5 half-lives, whichever is longer. Participants must be able to perform pulmonary function tests adequately and reliably. Participants must be able to have an adequate echocardiography assessment at screening for evaluation of left ventricular structure and function as defined by the protocol. Participants must be accessible for treatment and follow-up and be able to undergo all study procedures. Participants living at distant locations from the investigational site must be able and willing to travel to a site for the initial and all on-site follow-up visits. Participants must be able to undergo low-dose WBCT (excluding head) without sedation. Body weight ≥10 kg. Abstinent or using two highly effective forms of birth control. Females must also have a negative blood or urine pregnancy test prior to administration of study drug.

Key Exclusion Criteria:  Participants with complete heart block and left bundle branch block on screening electrocardiogram. Participants with screening echocardiography showing septal or left ventricular free wall thickness >12 mm for adult participants or a z-score >3 compared with population norms for children and adolescent participants or left ventricular ejection fraction (LVEF) <50%. Participants with severe mitral or tricuspid regurgitation on echocardiography at screening. Participants with significant underlying lung disease requiring supplementary oxygen or forced vital capacity <35% of
predicted at screening.
Participants with uncontrolled cardiovascular, hepatic, pulmonary, gastrointestinal, endocrine, metabolic, ophthalmologic, immunologic, psychiatric, or another significant disease as judged by the investigator.
Participants with severe hepatic impairment.
Concomitant medications that are strong inhibitors (including grapefruit juice) or inducers (including St John's Wort) of cytochrome P450 (CYP) 3A4 activity; or kinase inhibitors such as imatinib.
Prior use in the past year and concomitant use of bisphosphonates for participants in the PET-CT sub study.
Concurrent participation in another interventional clinical study, or a noninterventional study with radiographic measures or invasive procedures (e.g. collection of blood or tissue samples).
Amylase or lipase >2× the upper limit of normal (ULN) or with a history of chronic pancreatitis.
Elevated aspartate aminotransferase (AST) or alanine aminotransferase (ALT) >5×ULN.
Participants with hematologic abnormalities:
Hgb<10g/dL
Platelets<75,000/mm3
WBC<2000/mm3
Participants with coagulation test measurements outside of the normal range at screening.

<table>
<thead>
<tr>
<th>Which section would you like the trial listed under?</th>
<th>FOP Clinical Trials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Katherine Toder</td>
</tr>
<tr>
<td>Phone</td>
<td>(267) 438-5585</td>
</tr>
<tr>
<td>Email:</td>
<td><a href="mailto:katherine.toder@pennmedicine.upenn.edu">katherine.toder@pennmedicine.upenn.edu</a></td>
</tr>
</tbody>
</table>