

A Phase II Randomized, Double-Blind, Vehicle-Controlled, Crossover Clinical Trial of Tazarotene 0.1% and Vehicle-Control Cream Each Applied Once-Daily for 12 or 24 Months in Subjects with Basal Cell Nevus Syndrome

IRB# 2007-022

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Synopsis:

The purpose of this multicenter, double-blind trial is to determine if tazarotene cream applied to the chest for 24 months will reduce the rate of development of basal cell carcinomas (BCCs) in subjects meeting the diagnostic criteria for basal cell nevus syndrome (BCNS). Men and women (n=42) aged 18 - 75 years old who have developed at least three BCCs 9 mm² or greater on the chest, and at least three BCCs 9 mm² or greater on the back during the year prior to study entry, and meet diagnostic criteria for BCNS will be eligible. Thirty-five (35) participants will be randomized into two arms: Arm 1 will comprise of seven (7) participants will be randomized to 0.1% tazarotene qd for 12 months, with crossover to vehicle cream qd for an additional 24 months; Arm 2 will comprise of 35 subjects who will receive vehicle cream qd for 12 months, with crossover to 0.1% tazarotene qd for an additional 24 months. Data collected from Arm 2 will be used to assess chemopreventive efficacy; data collected from the seven subjects in Arm 1 will be used to ensure double blinding and to help assess the "wash-out" period for tazarotene-reduced BCC incidence.

The goal of this study is to expand and refine chemopreventive strategies in individuals with basal cell nevus syndrome (BCNS) who are at high risk for the development of basal cell carcinomas (BCCs). Our hypothesis, based on preclinical mouse data and on small human chemotherapy trials, is that application of tazarotene to susceptible skin regions will reduce the development of basal cell carcinomas.

The primary objective of the study is to determine whether tazarotene, 0.1% cream, applied to the chest for two years will reduce the numbers of BCCs observed as compared to the number expected. The latter expectation will be based on changes in BCC numbers observed during months 0-12 when vehicle cream is applied. Changes in numbers of BCCs on the untreated back will be used to control for any period effect.

The secondary objectives are exploratory analyses to compare the difference in total BCC burden (measured as the total lesion surface area) between chest and back over various time points and aggregated intervals of interest. We also will determine whether there are any detectable wash-in and/ or wash-out periods for the tazarotene effects. We will explore the use of a random effects model for longitudinal analysis of total lesions over time.

BCCs developing on the back will be identified and recorded to allow assessment of possible period effects. The total number and incidence of BCCs and safety will also be evaluated.