Transitioning Patients with Pulmonary Arterial Hypertension from Inhaled Prostacyclin to Oral Prostacyclin: Single-Center Experience


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**Purpose:** 1) Demonstrate safety of Saint Luke’s Pulmonary Hypertension Clinic’s protocol to transition patients from inhaled to oral prostacyclin; 2) Identify common patient characteristics of patients who would benefit from transition; and 3) Patient outcomes after transition.

**Background:** Pulmonary arterial hypertension (PAH) is a devastating disease with various treatment options dependent on many factors. An oral prostacyclin has been approved for treatment of PAH, but no guidelines exist for transitioning patients to this therapy. This is a report of Saint Luke’s Pulmonary Hypertension Clinic’s single-center experience transitioning patients with PAH from inhaled treprostinil to oral treprostinil.

**Methods:** Retrospective chart review of patients transitioned from inhaled treprostinil to oral treprostinil from June 2014 through May 2015.

**Results:** A total of 22 patients (mean age 61.1 years [range 21-86], 16 females) with PAH (7 idiopathic, 7 congenital heart disease, 8 collagen vascular disease) were transitioned from inhaled treprostinil therapy to oral treprostinil therapy. Common characteristics of patients transitioned included: cough – 13, higher dose – 4, and convenience was cited by 5. All patients were transitioned using Saint Luke’s Pulmonary Hypertension Clinic’s specific protocol. Twenty patients were dosed 3 times daily, 1 patient twice daily, and 1 patient went from 3 times daily to twice daily. Of the 22 patients transitioned, 6 discontinued (27.2%) oral treprostinil. Reasons for discontinuation included: inability to comply with dosing – 2, higher dosing required than tolerated orally – 1, side effects – 2, therapy no longer required – 1. There was one death unrelated to disease state/transition. Based on this small case series, patients can safely transition from inhaled to oral prostacyclin therapy. Twice daily dosing improved patient compliance with the calorie requirements. Patients unable to comply with calorie requirements failed oral treprostinil treatment.

**Conclusion:** Larger studies and longer durations of clinical follow up are required to validate oral treprostinil transition protocols. Further study is required to evaluate the impact of caloric intake on the durability of oral treprostinil therapy.