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Circulating Fibrocytes as a Biomarker of Prognosis in Hermansky-Pudlak Syndrome

To the Editor:

It was with great interest that I read the article by Trimble and colleagues (1), which concluded that CXCR4⁺ fibrocyte concentration could be predictive of the outcome of interstitial lung diseases in patients with Hermansky-Pudlak syndrome.

It is well known that a complex array of factors could regulate fibrocyte biology. For example, fibrocyte differentiation was inhibited in culture within serum-enriched media because a stable serum protein, serum amyloid P, could inhibit fibrocyte differentiation (2). Therefore, the levels of circulating fibrocytes could be affected by the levels of serum amyloid P. In addition, low-molecular-weight heparin had antifibrotic effects despite its nonanticoagulant activities and could affect the levels of circulating fibrocytes (3). In the study by Trimble and colleagues (1), however, the abovementioned factors that could affect the levels of circulating fibrocytes were not described in detail. Further studies should be performed without the abovementioned factors. ■

Author disclosures are available with the text of this letter at www.atsjournals.org.

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Reply

From the Author:

We thank Dr. Song for his interest in our work (1). We agree that a number of factors, among them serum amyloid P and low-molecular-weight heparins, can influence fibrocyte differentiation from circulating cells under cell culture conditions. Meaningful

extrapolation from such *in vitro* experiments to *in vivo* fibrocyte biology, however, is problematic: first because the *in vitro* conditions are very different from the conditions fibrocytes encounter *in vivo*, and second because serum amyloid P and heparins have complex and manifold *in vivo* functions that are not captured in culture. It is therefore far from clear that these factors are relevant to the biology of human fibrocytes during disease states in general, and whether they have any influence on the concentration of circulating fibrocytes in interstitial lung diseases in particular. We thus contend that although these considerations may be interesting avenues for future investigation, they do not materially affect the conclusions of our manuscript; namely, that circulating fibrocyte concentrations predict survival in patients with Hermansky-Pudlak syndrome and may be useful as a biomarker for outcome of interstitial lung disease. ■

Author disclosures are available with the text of this letter at www.atsjournals.org.

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1. Trimble A, Gochuico BR, Markello TC, Fischer R, Gahl WA, Lee JK, Kim Y, Burdick MD, Strieter RM, Mehrad B. Circulating fibrocytes as biomarker of prognosis in Hermansky-Pudlak syndrome. *Am J Respir Crit Care Med* 2014;190:1395–1401.

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Erratum: Epigenomics of Idiopathic Pulmonary Fibrosis: Evaluating the First Steps

An editorial published in the September 15, 2012, issue of the *Journal* (1) contained an error. The editorial, which comments on the article by Sanders and colleagues appearing in the same issue (2), misstates the identity of a zinc finger that is discussed in Sanders and colleagues' article. The editorial should have stated that Sanders and colleagues "also validate the results by demonstrating protein decreases in hypermethylated ZNF467"; the editorial incorrectly lists ZNF465 instead.

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