Eosinophilic esophagitis (EoE) is a chronic disease of the esophagus that affects over 300,000 patients in the United States alone. Diagnosis requires several endoscopy procedures that utilize both visual evaluation and biopsy. At least four biopsy specimens are necessary to confirm a diagnosis. Additional biopsies are used to evaluate treatment efficacy. The cost, invasiveness, and discomfort experienced due to this method of diagnosing and monitoring EoE cause patients to forgo treatment or go undiagnosed. Using heparin as a contrast agent enables non-invasive visualization of eosinophils in single photon emission computed tomography (SPECT) imaging. The polyanion is either radiolabeled or fluorescently labeled and deposited onto the eosinophil degranulation. This provides a novel method for clinical detection and progression monitoring of EoE, as well as other diseases of the esophagus.

**Features and Benefits**
- Enables noninvasive visualization of eosinophils for improved diagnosis and treatment monitoring of EoE.
- Reduces cost, discomfort, and sedation risks by decreasing endoscopy procedures.

**Recent Publications**

**Inventor Profile**
Kathryn Peterson, M.D., Associate Professor – Gastroenterology
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