



PCI-01

## **Emerging roles of eosinophil-derived lipid mediators in controlling inflammation and resolution**

**Makoto Arita**

Department of Health Chemistry, Graduate School of Pharmaceutical Sciences, The University of Tokyo, and PRESTO, JST, Japan

### **Abstract**

Acute inflammation and its resolution are essential processes for tissue protection and homeostasis. Once thought to be a passive process, the resolution of inflammation is now shown to involve active biochemical programs that enable inflamed tissues to return to homeostasis. The mechanisms by which acute inflammation is resolved are of interest, and research in recent years has uncovered new endogenous anti-inflammatory and pro-resolving lipid mediators generated from polyunsaturated fatty acids (PUFAs). We present new insights into the cellular and molecular mechanisms of inflammatory resolution, especially the roles of eosinophils, and a series of PUFA-derived anti-inflammatory lipid mediators that they generate.