MMP-based Inhibitors and Tracers

OCR Number: OCR 6966

Description:

**Novel matrix metalloproteinases (MMPs) Inhibitor and MMP-targeted imaging tracers**

- Upregulation of MMPs is associated with a wide range of diseases including cancers, inflammation and cardiovascular diseases.
- Measurement of MMP expression and activation in vivo could enable physicians to accurately diagnose and treat MMP-associated diseases.
- Currently there are no tracers available in the clinic for imaging MMP activity.
- A new type of a MMP inhibitor (1) has been developed, which also serves as a versatile scaffold (3) for developing MMP-targeted imaging agents.
- Additionally, a novel precursor was also designed as a parent building block for making different type of hydrophilic MMP imaging tracers.
- These novel scaffolds display improved pharmacokinetics and water solubility as compared to previously reported MMP SEPCT probes (i.e.RP805)

**Lead Innovator:** Mehran Sadeghi, PhD  
**IP status:** PCT/US2017/026610

---

**PI:** Mehran Sadeghi

**Licensing Contact:** Christopher Unsworth  
christopher.unsworth@yale.edu