HDAC Inhibitors for the Treatment of Pulmonary Arterial Hypertension

**OCR Number:** OCR 6370

**Description:**

- The transcription factor myocyte enhancer factor 2 (MEF2) is significantly impaired in pulmonary arterial hypertension (PAH).
- Inhibition of class IIa HDACs restored MEF2 activity in pulmonary arterial endothelial cells (PAECs), as demonstrated by increased expression of targets, including miR-424 and miR-503.
- Augmentation of MEF2 activity holds a potential therapeutic value in PAH.
- Selective HDAC IIa inhibition was identified as a viable alternative approach to avoid the potential adverse effects of broad spectrum HDAC inhibition in PAH.

![Expression of miR-424 and miR-503](image)

Expression of miR-424 and miR-503 significantly increases in PAH PAECs treated with MC1568, a HDAC class IIa specific inhibitor that restores MEF2 activity.

**IP Status:** PCT filed

**Publications:**

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