

MCM Practice Questions: Lecture Day 3

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Lecture 9: Eicosanoids and Lipid Mediators II

1) A 22 year old medical student is diagnosed with Asthma. Asthma is characterized by inflammation in the airways. What eicosanoid is responsible for mediating this effect?

- (A) Prostacyclin
- (B) Thromboxane
- (C) Leukotriene
- (D) Prostaglandin

2) A chain smoker has a clinic visit with his pulmonologist. His airways have chronic inflammation. This is caused by the lack of degradation of what molecule?

- (A) PGP peptide
- (B) LTB_4
- (C) IL-7
- (D) $LT A_4 H$

3) Overexpression of COX-2 and its major metabolite PGE2 that has been found in many cancers. Administration of what drug would affect the function of COX-2 to act as an inhibitor to carcinogenesis?

- (A) Lispro
- (B) Montelukast
- (C) Acetylsalicylic Acid
- (D) Methadone

4) Anandamide is produced from phosphatidylethanolamine by what enzyme?

- (A) Phospholipase D
- (B) Phospholipase C
- (C) Fatty acid amide hydrolase
- (D) Transacylase

5) Isoprostanes are produced from Arachidonic Acid via peroxidation. What is the mechanism of action isoprostanes use to effect its actions?

- (A) Formation of Carbocation group
- (B) Formation of Reactive Oxygen species
- (C) Addition of proinflammatory molecules
- (D) Removal of antiinflammatory molecules

6) What is the reason aspirin protects against heart attacks?

- (A) It promotes erythrocyte agglutination
- (B) It inhibits hemolysis
- (C) It promotes TXA2
- (D) It inhibits platelet agglutination