cigarette smokers, using alumopuro to inhibit XIa.

Methods: A cohort of 1503 male normotensive, middle-aged men participated in a 2-week smoking cessation trial followed by the smoking status assessment at 12- and 24-month follow-up.

Results: Participants who quit smoking during the trial had lower 24-month levels of plasma uric acid (417.3±5.6 mg/dl) compared with those who continued smoking (456.7±6.2 mg/dl; p<0.05). In men who quit, plasma uric acid levels continued to decrease at 24 months (393.5±5.3 mg/dl; p<0.05) while levels in smokers did not change (456.7±6.2 mg/dl).

Conclusions: Smoking cessation is associated with a decrease in plasma uric acid levels in middle-aged men. Further studies are needed to determine the mechanisms by which smoking cessation decreases plasma uric acid levels and to assess the impact of smoking cessation on other outcomes associated with uric acid levels.

S121-80

Immunization With A Novel Human Apo B100 Related Peptide Reduces Atherosclerosis in Apo E Null Mice

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Background: A novel human apo B100 related peptide was previously identified by us and shown to induce significant anti-atherosclerotic effects in apoE null mice. In this study, we tested the efficacy of this novel peptide in reducing atherosclerosis in apoE null mice.

Methods: The novel human apo B100 related peptide was immunized in apoE null mice. The extent of atherosclerosis was assessed by histological analysis of the aorta and arch vessels.

Results: Immunization with the novel peptide significantly reduced the extent of atherosclerosis in the aorta and arch vessels of apoE null mice compared to the control group.

Conclusion: Immunization with the novel human apo B100 related peptide can significantly reduce atherosclerosis in apoE null mice.

S121-81

Inhibition of Atheroma in Apo E Null Mice by Inhibition of Its High Affinity Interaction With LDL May Account for the Therapeutic Effect of Ezetimibe

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Background: Atheroma in Apo E null mice is characterized by a dense accumulation of LDL particles in the aortic arch. Inhibition of the high affinity interaction between LDL and its receptor may provide a novel therapeutic strategy for the prevention of atherosclerosis.

Methods: Apo E null mice were fed a diet containing 1% cholesterol and 1% cholic acid for 12 weeks. One group of mice was treated with ezetimibe, a drug that inhibits the absorption of cholesterol from the gut, while the other group served as the control.

Results: The mice treated with ezetimibe had a significant reduction in the accumulation of LDL particles in the aortic arch compared to the control group.

Conclusion: Inhibition of the high affinity interaction between LDL and its receptor may provide a novel therapeutic strategy for the prevention of atherosclerosis.

S121-82

Selection of Epitopes by Antibody Response in Atherosclerosis

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Background: Atherosclerosis is a chronic inflammatory disease that involves the immune system. The immune response to atherosclerosis is mediated by antibodies that target specific epitopes on the atherosclerotic plaques.

Methods: A library of atherosclerotic plaques from ApoE-/- mice was used to screen for epitopes that induce athero-protective immune responses. The epitopes were identified by binding assays and confirmed by Western blotting.

Results: A single epitope was identified that was able to induce athero-protective immune responses in ApoE-/- mice.

Conclusion: The identification of this epitope provides a potential target for the development of a therapeutic agent for the treatment of atherosclerosis.

S121-83

Identification of Athero-protective Epitopes by a Novel High Throughput Method

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Background: Athero-protective epitopes are important for the development of athero-protective therapies. A novel high throughput method was developed to identify such epitopes.

Methods: A library of atherosclerotic plaques from ApoE-/- mice was screened for epitopes that induce athero-protective immune responses using a novel high throughput method.

Results: A single epitope was identified that was able to induce athero-protective immune responses in ApoE-/- mice.

Conclusion: The identification of this epitope provides a potential target for the development of athero-protective therapies.