Nitric Oxide Synthase Inhibitors Background Nitric oxide synthase (NOS) mediated diseases include sunburn, rheumatoid arthritis, ulcerative colitis, Crohn's disease, septic and toxic shock, asthma, hypertension, myocarditis, diabetes and autoimmune and respiratory disorders. Nitric oxide is synthesized via the arginine to citrulline deamination pathway making this pathway a target for the design of therapeutic drugs. The literature describes various N-γ-substituted arginines as inhibitors of NOS.

Description of the Technology

This invention relates to a novel class of planar, fused-ring bio-isoteric models of arginine as NOS inhibitors. The synthesis, structure, and utility of eight novel members of triazole families that inhibit NOS have been described. One of the compounds when tested on mammalian PAM 212 cancer cells showed antiproliferative property.

Applications

- For use as NOS inhibitors in diseases requiring inhibition of NOS
- Anticancer agents

Advantages

- Compounds can be administered transdermally such as subcutaneous, intramuscular or intravenous injection, nasal sprays, etc.
- Compounds can be administered by oral route

Deliverables

- NOS inhibitors
- Methods for synthesis of the inhibitors
- Structures of the inhibitors
- Methods for antiproliferative bio-assays

Patent Status

- United States and PCT applications filed (international publication # WO 00/10564)

Licensing Opportunity

- This technology is available for non-exclusive or exclusive license.

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