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What is claimed is:

1. A method to increase the survival of a subject having been exposed to sulfur mustard (SM) or an analog thereof, wherein exposure to the SM or an analog thereof results in fibrin-containing cast formation in the airways of the subject, comprising administering to the airway of the subject tissue plasminogen activator (tPA) or analog thereof, wherein survival of the subject is increased.

2. The method of claim **1**, wherein the analog is 2-chloroethyl ethylsulfide (CEES).

3. The method of claim **1**, wherein the tPA is administered in a dose amount of about 0.1 mg/kg/dose to about 1.0 mg/kg/dose.

4. The method of claim **1**, wherein the tPA is administered in a dose amount of about 0.4 mg/kg/dose to about 0.8 mg/kg/dose.

5. The method of claim **1**, wherein the tPA is administered to the airway of the subject by a delivery method selected from the group consisting of inhalation, nebulization, aerosolization and intratracheal delivery.

6. The method of claim **1**, wherein the step of administering comprises administering to the subject an initial dose of the tPA followed by administering an additional dose of the tPA to the subject.

7. The method of claim **1**, wherein the step of administering the tPA is conducted immediately after exposure of the subject to the SM or analog thereof.

8. The method of claim **1**, wherein the step of administering the tPA is conducted within about 0 hours to about 14 days after exposure of the subject to the SM or analog thereof.

9. The method of claim **1**, wherein the step of administering the tPA comprises administering an initial dose of the