Treatment of Bacterial Sepsis

OCR Number: OCR 6931

Description:

- This invention constitutes both the synthetic and natural-occurring glucose analogs for bacterial sepsis treatment.

- In one case, the analog can be 2-Deoxy-D-glucose (2DG) (Figure 1), a synthetic glucose analog that is widely used as a PET-CT imaging agent for cancer diagnosis.

- In another case, the analog can be mannoheptulose, a natural occurring glucose utilization inhibitor that can be found in avocado.

- Both glucose analogs prove to significantly improve the survival rate of mice suffering from bacterial sepsis, demonstrating their use as potential drugs or food supplements for treating bacterial septic patients.

- **Intellectual property** – A patent application has been filed.

![LPS Survival: Glucose vs 2DG](image)

Figure 1. 2DG promotes survival during LPS sepsis

PI: Ruslan Medzhitov

**Licensing Contact:** Hong Peng

hong.peng@yale.edu