



Increased Mortality in Burns with *Stenotrophomonas maltophilia*



Stenotrophomonas maltophilia is a virulent bacteria associated with increased morbidity and mortality, requiring aggressive vigilance in burn centers

Significance

Stenotrophomonas maltophilia is difficult to treat in immunocompromised hosts due to its natural resistance to multiple antibiotics and ubiquitous presence. Our objective was to evaluate the clinical characteristics of burn patients diagnosed with the bacteria in the North Carolina Jaycee Burn Unit.

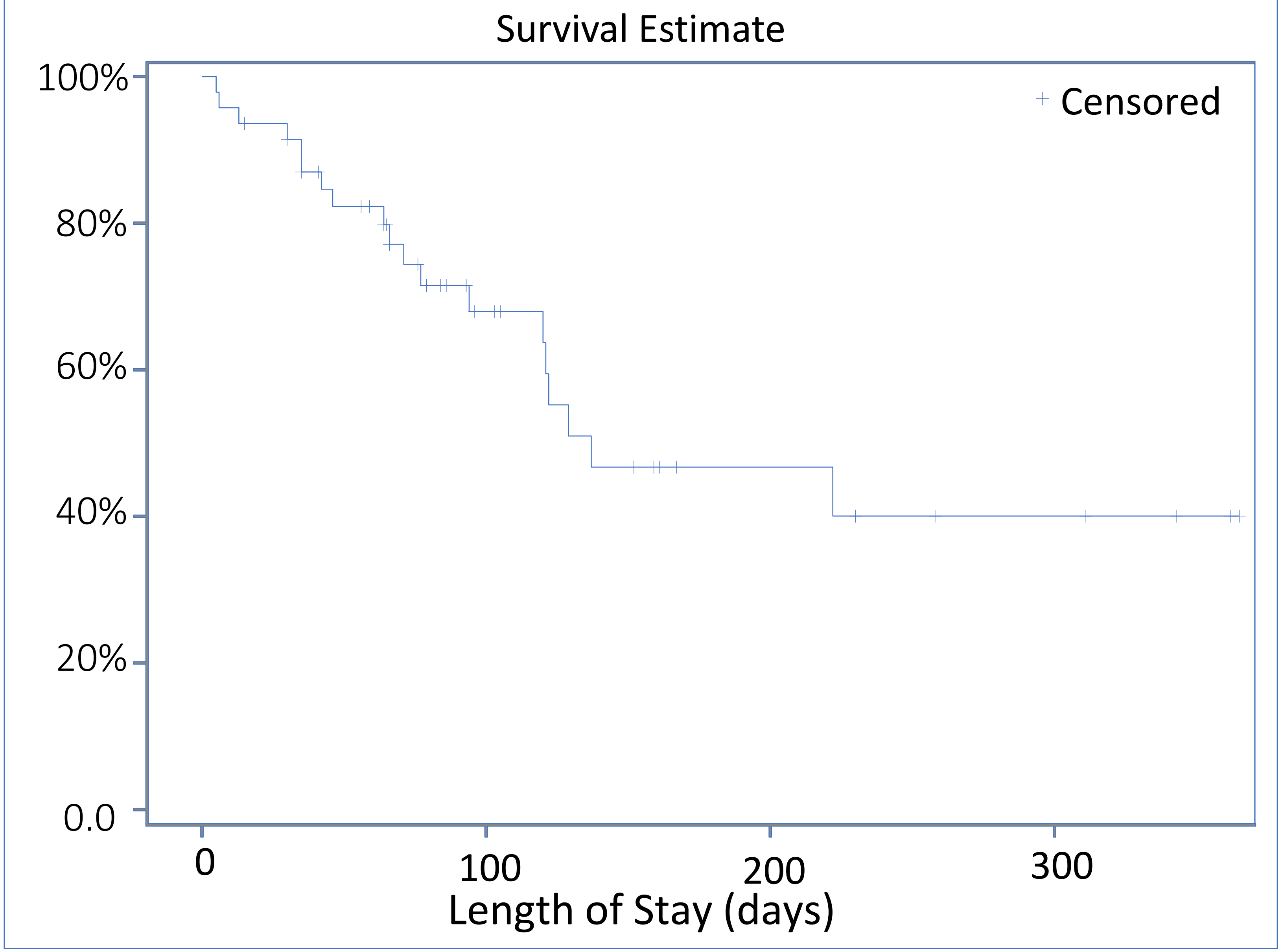
Lessons Learned

- Patients that tested positive for *Stenotrophomonas maltophilia* were older, male, flame injured, mechanically ventilated, had large TBSA involvement, and had prolonged hospital courses
- Cultures positive for *Stenotrophomonas maltophilia* require aggressive source control and burn centers need to be hypervigilant in controlling factors to mitigate risk

Results

We identified 47 patients diagnosed with a *Stenotrophomonas maltophilia* infection in the North Carolina Jaycee Burn Unit between June 1, 2012 and June 1, 2019.

Variables	<i>Stenotrophomonas maltophilia</i> + Culture
Number of Patients	47
Male (%)	63.8%
Female (%)	36.2%
Mean Age (± SD)	51 (±16)
Etiology: Flame	61.7%
Etiology: SJS/TEN	17.0%
TBSA% (± SD)	29.3% (±18)
Average time from admit to biopsy	34.5 days
Intubated (%)	100%
+ culture from bronchial alveolar lavage	96%
Mean Length of Hospital Stay (± SD)	99.6 (± 77.7)
Mortality	46%



Kaylyn Pogson, MA¹, Kamil Nurczyk, MD², Lori Chrisco, RN, MSN², Rabia Nizamani, MD², Samuel Jones, MD, FACS², Bruce A. Cairns, MD, FACS², Felicia N. Williams, MD, FACS²
¹University of North Carolina School of Medicine, ²North Carolina Jaycee Burn Center, Department of Surgery, University of North Carolina School of Medicine