# Safety and Tolerability of Tedizolid as Oral Treatment for Bone and Joint Infections

Abstract: 306

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NOTE: data in this poster reflects updated data that differs slightly from that published in the ID Week 2018 program

## BACKGROUND

- Bone and joint infections (BJIs) are common infections managed by infectious diseases specialists
- Mounting data suggest that oral therapy is equivalent to intravenous therapy and is typically preferred by patients.
- Tedizolid is an oxazolidinone with broad gram positive coverage that in *in vivo* models lack the hematologic and neurologic toxicity of linezolid

## METHODS

- We are conducting an open label, single-center trial of oral tedizolid for the treatment of BJIs; herein we describe our interim findings
- Patients are eligible if they have a BJI caused by documented or suspected gram positive pathogen and require 4 -12 weeks of therapy
- Enrolled patients undergo weekly monitoring for:
  - neurologic and visual side effects
  - hematologic toxicity (CBC)
  - metabolic abnormalities (comprehensive metabolic panel)
- Patients with peripheral neuropathy and cytopenias are excluded from participation

## RESULTS

- To date we have enrolled 22 subjects:
  - 20 (91%) male
  - 14 (63%) hardware-assd infection, 5 (23%) osteomyelitis without prosthesis, 3 (14%) prosthetic joint infection
  - Significant co-morbidities include: 6 (27%) with diabetes, 1 (5%) with systemic lupus erythematosus
- Causative pathogens were diverse (Figure 1)
- Mean (median) duration of treatment has been 9.2 (11) weeks

## RESULTS

**Figure 1: Causative Organisms (n=22)**

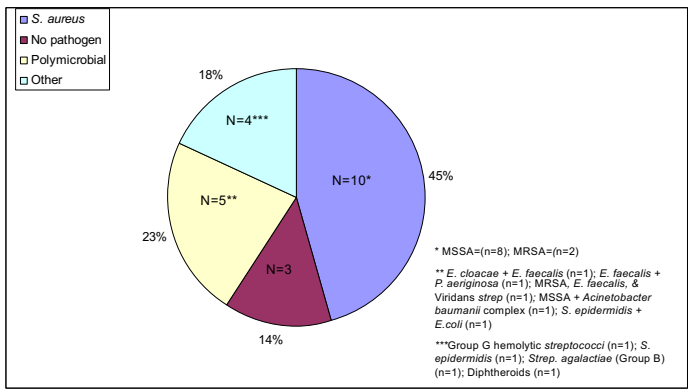
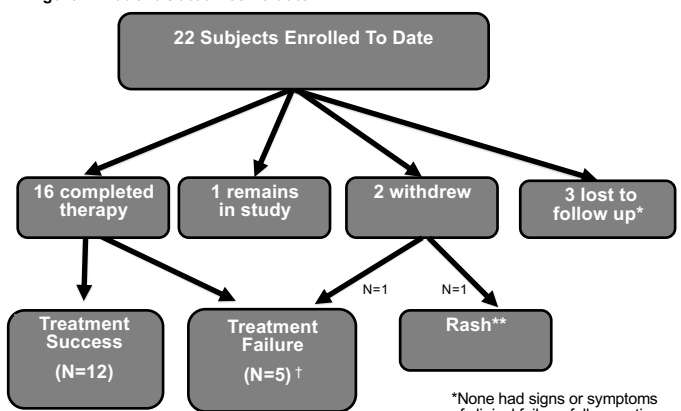



**Figure 2: Patient Outcomes To date**




† 3 failures associated with anatomic abnormalities/retained hardware requiring subsequent procedures (see text)

*None had signs or symptoms of clinical failure; follow up time for these subjects was 0 weeks (n=1) and 8 weeks (n=2)

**Mild, self-limited maculopapular rash

## RESULTS

- Withdraws have been associated with:
  - N=1, non-life threatening maculopapular rash
  - N=1, retained hardware and infected pin (also categorized as treatment failure)
- Failures have been associated with:
  - N=1, previously undetected retained hardware
  - N=1, sequestrum requiring surgery
  - N=1, retained hardware and infected pin
  - N=2*, failure to achieve cure after the designated treatment course
- Drug-related adverse events occurred in 2 patients (9%), both mild, self-limited non-life threatening maculopapular rashes, one subject requested to be withdrawn from study
- There have been no cases of cytopenias, peripheral or optic neuropathy

*Patient #1 with early *S. epidermidis* PJI treated with linear exchange medical management. Received 8 weeks of IV vancomycin with PO rifampin followed by 12 weeks of tedizolid. After tedizolid, patient had 1 additional month of doxycycline with out resolution of signs and symptoms of infection and underwent 1-stage total knee arthroplasty

Patient #2 with right ankle MSSA hardware infection with abscess. Patient treated with 4 days of IV cefazolin followed by 10 weeks of tedizolid. After tedizolid discontinuation patient presented with signs and symptoms of infection relapse. Patient was then prescribed PO doxycycline and was lost to follow up.

## CONCLUSIONS

- Tedizolid appears to be a well tolerated oral antibiotic for treatment of bone and joint infections for 4 weeks or greater
- Clinical failure rates appear roughly similar to that of other treatments for BJI
- Further study of tedizolid for BJIs is warranted

## References

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