



# 2016 AASV Annual Meeting Proceedings Paper Formatting Guidelines

## SUBMISSION

- All papers are due Monday, November 16
- Submit files to: [aasv@aasv.org](mailto:aasv@aasv.org)
- Questions? Call 515-465-5255 or email [aasv@aasv.org](mailto:aasv@aasv.org).

## PAPER LENGTH

### • ALL POSTER PRESENTATIONS

Limit your paper to one formatted page of text (one sided) plus one table OR figure. Your table/figure must fit on one page or less.

### • INDUSTRIAL PARTNERS ORAL PRESENTATIONS

Limit your paper to a TOTAL of five formatted pages, INCLUDING tables and figures (counting 2 figures or tables per page).

### • ALL OTHER PRESENTATIONS

No limit, within reason. Most papers are 2-5 pages in length when submitted in the requested format.

## FILE TYPES

### • TEXT

Submit the text for your paper in a Word document. Do NOT include tables or figures in this file, but DO include your table and figure references, such as (Table 1) or (Figure 1), within the text. See the sample text file on the next page for additional details.

### • TABLES

If your paper includes tables, create and submit the tables in a second Word document, separate from the text. You may submit multiple tables in a single Word document. Please do not use Excel to create or submit tables.

### • FIGURES

Use the term “Figure” to refer to and number ALL charts, graphs, and photos in your paper. We prefer to receive charts and graphs that have been created in Excel; **submit the original xls file(s)**. Do NOT use PowerPoint. For charts and graphs created in statistics software, please submit each as a pdf file. Use of color is permissible, but keep in mind that colors may not be distinguishable when printed in black and white. Submit photographs and images as high resolution jpg or tif files. If needed, submit a separate Word document containing your figure captions. Please do not copy/paste your figures into the Word document containing your text.

## BEFORE YOU SUBMIT

- Please have SOMEONE ELSE proofread your paper BEFORE you submit your files.
- Be sure to “Approve All Changes” and exit “Track Changes” mode before saving and submitting your files.

Table 1: Create tables in Word, not Excel.

Group	Maternal antibodies	SIV vaccine	SIV challenge
1	No	No	No
2	No	Yes	No
3	Yes	No	No
4	Yes	Yes	No
5	No	No	Yes
6	No	Yes	Yes
7	Yes	No	Yes
8	Yes	Yes	Yes

Figure 1: Include your figure captions with figures or in a separate Word document.

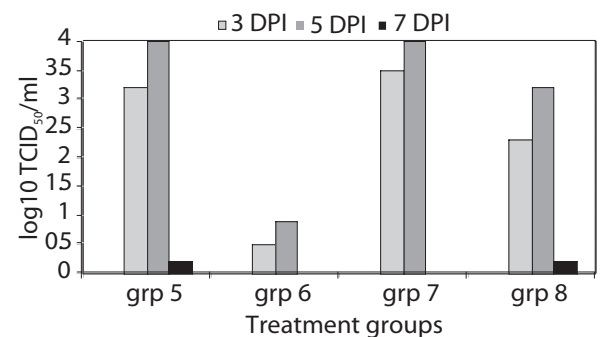


Figure 2: Refer to images as figures.



**SUBMISSION DUE DATE IS NOVEMBER 16, 2015**

# TEXT FORMATTING

## Layout

- Use a single-column layout, with single-spaced lines. Margins are not critical; 1" is customary.
- Use Times New Roman font; see below for font sizes.
- Do not use outline or bullet point format.
- Do not send PowerPoint files.

## Paper title

- Font size 24pt (do not bold or underline)
- Sentence capitalization (capitalize first letter of first word only)

## Author info

- Font size 12pt
- Use full name with first name or initial first. Then a comma followed by degree(s)

## Headings

- Font size 16pt (do not bold or underline)
- Sentence capitalization

## Subheadings

- Font size 12pt (do not bold or underline)
- Sentence capitalization (capitalize first word only)

## Body of text

- Font size 10pt
- Use only ONE space between sentences (not two like we were taught in typing class).
- Use *italics* only for *Genus species* names, titles of books and journals, and *P* values.
- Titles and headings should be emphasized by using the font size indicated above.
- Do not use **bold** or underlined text for titles, headings, OR within the body of your text.
- When quotation marks are used at the end of a phrase or sentence, always place the comma or period INSIDE the quotation mark. ALWAYS.
- Capitalize acronyms and initialisms but do not capitalize disease names unless *Genus species*. For example: porcine epidemic diarrhea virus (PEDV), influenza A (IAV-S), porcine circovirus type 2 (PCV2), *Brachyspira hyodysenteriae*
- Use a capital V to represent "virus" in acronyms ( PRRSV, PEDV, etc)

## Table/Figure references

- Make reference within the text to all tables and figures, citing them in consecutive order.
- Number tables separately from figures (Table 1, 2, 3 and Figure 1, 2, 3).
- Refer to all charts, graphs, photographs, and images as Figures.

## References

- Use superscript Arabic numerals (no Roman numerals) to number references in order within the text.
- Reference numbers that occur at the end of a sentence should be placed after the period.
- Do not use (Author, Year) within the text for references.
- Website reference example: National Pork Board. Swine Care Handbook. 2003. Available at: [www.antwifarms.com/docs/swinecarehandbook.pdf](http://www.antwifarms.com/docs/swinecarehandbook.pdf). Accessed 29 September 2010.
- Use the term "References" as the heading for the reference section, rather than Citations, Bibliography, Literature Cited, etc.
- Please - do not use the endnotes feature in Word to format references.

## Detection of tylvalosin (Aivlosin®) in synovial fluid from nursery pigs

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### Introduction

Infectious arthritis caused by *Mycoplasma hyosynoviae* and *M. hyorhinis* is a welfare and economic concern for swine operations.<sup>1</sup> Injectable lincomycin or tylosin are commonly used to treat these cases but are labor-intensive to administer compared to water medications. Aivlosin® (tylvalosin) Water Soluble Granules is approved for control of PPE. Field observations suggest it is also effective against *M. hyosynoviae*. There is no data available on tylvalosin's distribution to synovial fluid. The purpose of this preliminary study was to quantify the concentration of tylvalosin (TVN) and its major metabolite, 3-O-acetyltylvalosin (3-AT), in the synovial fluid of healthy nursery pigs gavaged with TVN at 10x the label dose. The second objective was to assess the stability of TVN and 3-AT in synovial samples stored at -80°C for 7 days.

### Materials and methods

Eight 9-week old commercial pigs were orally gavaged with 50mg tylvalosin/kg bodyweight in solution using a 14 Fr feeding tube. Feed was withheld the night prior to gavage until two hours post gavage. After treatment, one pig was euthanized and necropsied at 0, 1, 2, 3, 4, 6, 9 and 12 hours post-gavage. For each pig, synovial fluid was aspirated from multiple joints and pooled. Each pooled synovial sample was split into two aliquots of at least 100µl. The first aliquot was analyzed immediately for TVN and 3-AT using high-pressure liquid chromatography (1260 Infinity Pump and Autosampler, Agilent) with mass spectrometry detection (ABSciex QTRAP 4500). The second aliquot was stored at -80°C and analyzed seven days later. TVN and 3-AT analytical techniques were created and validated at Iowa State University.

### Results and discussion

TVN and 3-AT were detected in all fresh and frozen synovial samples except those collected at 0 hours post-gavage (Table 1). Concentrations of TVN and 3-AT peaked at two and three hours post administration for fresh samples and at one and three hours for frozen aliquots. TVN and 3-AT distributed to the synovial fluid and remained stable after sampling when stored for one week at -80°C. At the 0 hour time point, euthanasia was performed immediately after gavage so it was expected that TVN and 3-AT would not be detected. Rosener et al report that 90% of Japanese *M. hyosynoviae* isolates from 1988 have *in vitro* MICs for tylvalosin of less than 60ng/mL.<sup>2</sup> Tylvalosin MIC data for *M. hyorhinis* isolates from Thailand show the MIC<sub>50</sub> to be 190ng/mL.<sup>3</sup> When administered at ten times label dose by oral gavage, concentrations of tylvalosin in the synovial fluid were greater than MICs published for *M. hyosynoviae* and *M. hyorhinis*.

### References

1. Neto JC et al. Mycoplasma-associated arthritis: Critical points for diagnosis. *J Swine Health and Prod.* 2012;20:82.
  2. Rosener et al. In vitro susceptibility of Japanese, European and North American recent and historical isolates of *Mycoplasma* spp from swine to tylvalosin (Aivlosin®). *AASV.* 2013;213.
  3. Thongkamkoon et al. Thongkamkoon et al. In vitro test of *Mycoplasma hyorhinis* to anti-microbial agents. *APVS.* 2005;244.
- <sup>4</sup>Registered trademark of ECO Animal Health Ltd.