

## Supplementary Materials for

### **Imaging Enterobacteriaceae infection in vivo with <sup>18</sup>F-fluorodeoxyorbitol positron emission tomography**

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#### **This PDF file includes:**

- Fig. S1. Tissue histology from *E. coli* myositis in immunocompetent mice.
- Fig. S2. <sup>18</sup>F-FDS PET/CT imaging of *E. coli* myositis in immunosuppressed mice.
- Fig. S3. Dynamic <sup>18</sup>F-FDS PET imaging in mice with human brain tumors.

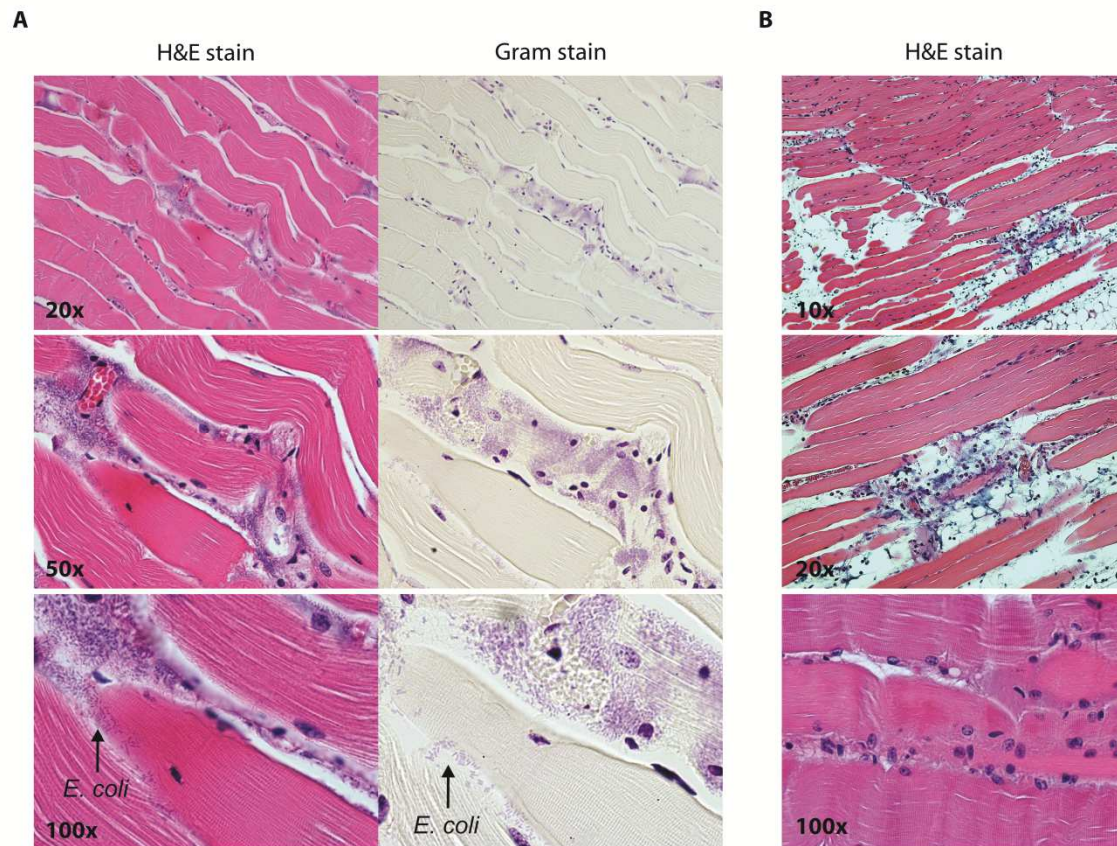
#### **Other Supplementary Material for this manuscript includes the following:**

(available at

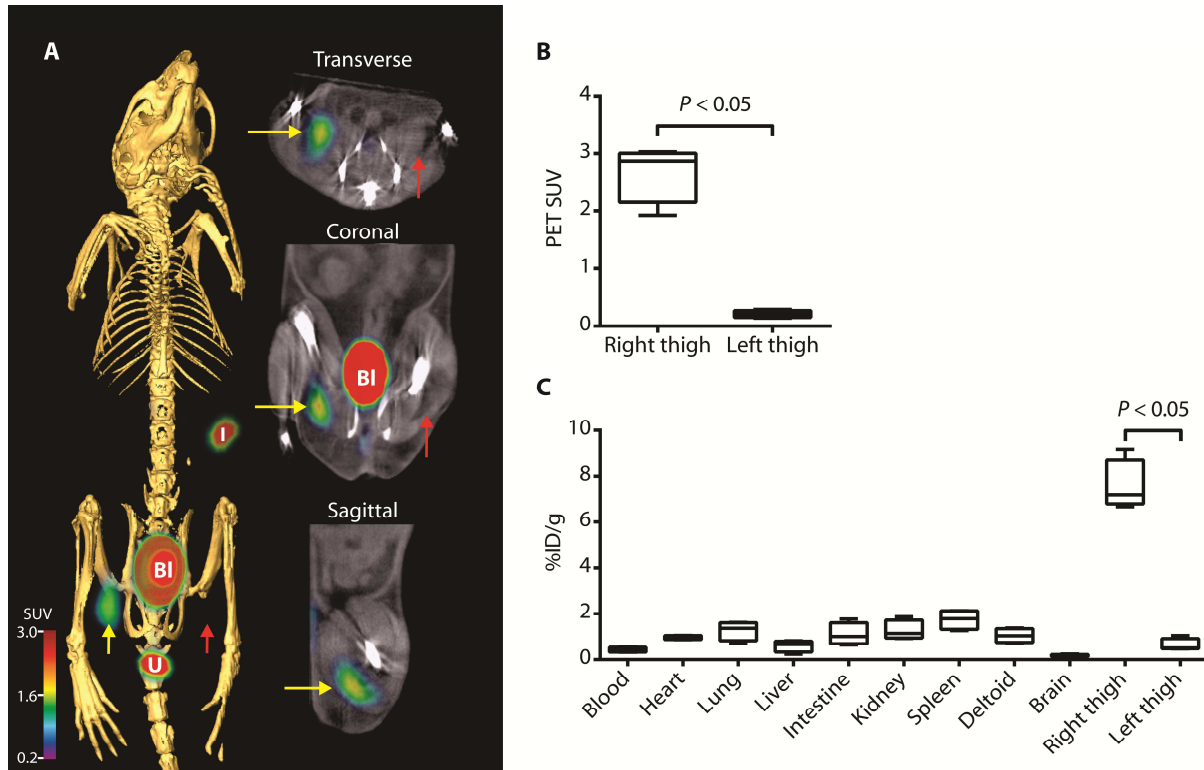
[www.sciencetranslationalmedicine.org/cgi/content/full/6/259/259ra146/DC1](http://www.sciencetranslationalmedicine.org/cgi/content/full/6/259/259ra146/DC1))

Movie S1 (.gif format). <sup>18</sup>F-FDS PET/CT imaging of *E. coli* myositis in immunocompetent mouse.

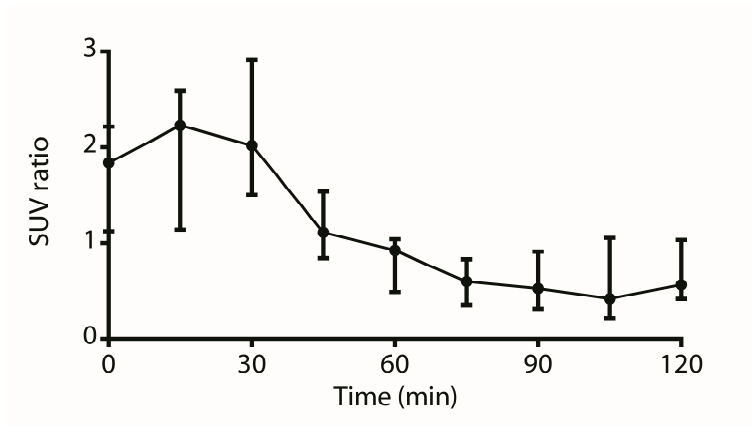
## SUPPLEMENTARY FIGURES



**Fig. S1. Tissue histology from *E. coli* myositis in immunocompetent mice.** Hematoxylin & eosin (H&E) and Gram stains. (A) Inflammatory cells and Gram-negative bacteria in *E. coli*-infected (right) thigh. (B) Inflammatory cells without bacteria in inflamed (left) thigh. Images are representative of 5 animals.



**Fig. S2.** <sup>18</sup>F-FDS PET/CT imaging of *E. coli* myositis in immunosuppressed mice. (A) <sup>18</sup>F-FDS PET signal is noted in the infected (yellow arrow) but not the control (sterile inflammation) thigh (red arrow). Labels indicate intestine (I), bladder (Bl) and extravasated urine (U). (B and C) <sup>18</sup>F-FDS PET signal *in vivo* from infected (right) and inflamed (left) thighs presented as standardized uptake values (SUV) (B), and post-mortem biodistribution in all organs presented as percent injected dose per gram of tissue (%ID/g) (C). Data are medians with interquartile and ranges ( $n = 4$  animals).  $P$  values in (B and C) compare right to left thigh, Mann-Whitney U test, two-tail.



**Fig. S3. Dynamic  $^{18}\text{F}$ -FDS PET imaging in mice with human brain tumors.**  $^{18}\text{F}$ -FDS PET signal from brain tumor (U87MG) over time. Data are medians and range, normalized to the uninflamed thigh muscle of each animal ( $n = 4$  animals).