

1 **Figure Legends for Supplemental Movies**

2 **Movie 1. Intravital imaging of the vasculature in the dermis of naïve mice.** The ear  
3 dermis of Tie2-GFP-expressing naïve mice were analyzed by multiphoton microscopy for  
4 30 min. Imaging was started immediately (1-2 min later) after i.v. Evans blue injection.  
5 Tie2 is in green and Evans blue in white. Representative 2D data from one mouse is  
6 shown with imaging data collected from at least 5 mice. Scale bar: 45 µm.

7 **Movie 2. Increased vascular permeability in the dermis is associated with *L. major***  
8 **infection.** The ear dermis of Tie2-GFP-expressing mice were infected with DsRed-  
9 labeled *L. major* parasites i.d. and the dermis of infected mice was analyzed at 5-6 wks  
10 p.i. by multiphoton microscopy for 30 min. Intravital imaging was started immediately  
11 (1-2 min later) after i.v. Evans blue injection. Parasites are seen in red, Tie2 in green and  
12 Evans blue in white. Representative 2D data from one mouse is shown with imaging data  
13 collected from at least 5 mice. Scale bar: 45 µm.

14 **Movie 3. Intravital imaging of the vasculature in the dermis of naïve mice.** The ear  
15 dermis of Tie2-GFP-expressing naïve mice were analyzed by multiphoton microscopy for  
16 30 min. Imaging was started immediately (1-2 min later) after i.v. Evans blue injection.  
17 Tie2 is in green and Evans blue in white. Representative 3D data from one mouse is  
18 shown with imaging data collected from at least 5 mice. 1 unit: 45.86 µm.

19 **Movie 4. Increased vascular permeability in the dermis is associated with *L. major***  
20 **infection.** The ear dermis of Tie2-GFP-expressing mice were infected with DsRed-  
21 labeled *L. major* parasites i.d. and the dermis of infected mice was analyzed at 5-6 wks  
22 p.i. by multiphoton microscopy for 30 min. Intravital imaging was started immediately  
23 (1-2 min later) after i.v. Evans blue injection. Parasites are seen in red, Tie2 in green and

24 Evans blue in white. Representative 3D data from one mouse is shown with imaging data

25 collected from at least 5 mice. 1 unit: 45.86  $\mu\text{m}$ .

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