Supplementary data

Supplement 1: Signal colocalization

Colocalization of 3-NT and DAPI signals was examined in the spinal cord of mice 7 dpi using confocal microscopy. Even though the signals were seemingly in one spot (see Figure S1A), they are rather next to each other than overlapping suggesting that 3-NT formed in close proximity to nuclei but not directly on nuclear lamina.

Additionally, colocalization of iNOS and Iba-1/GFAP signals was also examined in the spinal cord of mice 3 dpi using confocal microscopy. However, the colocalization of iNOS and the glial cell markers was not observed (see Figure S1B, C) suggesting that neither microglia nor astrocytes were the cells responsible for NO production in the infected tissue.

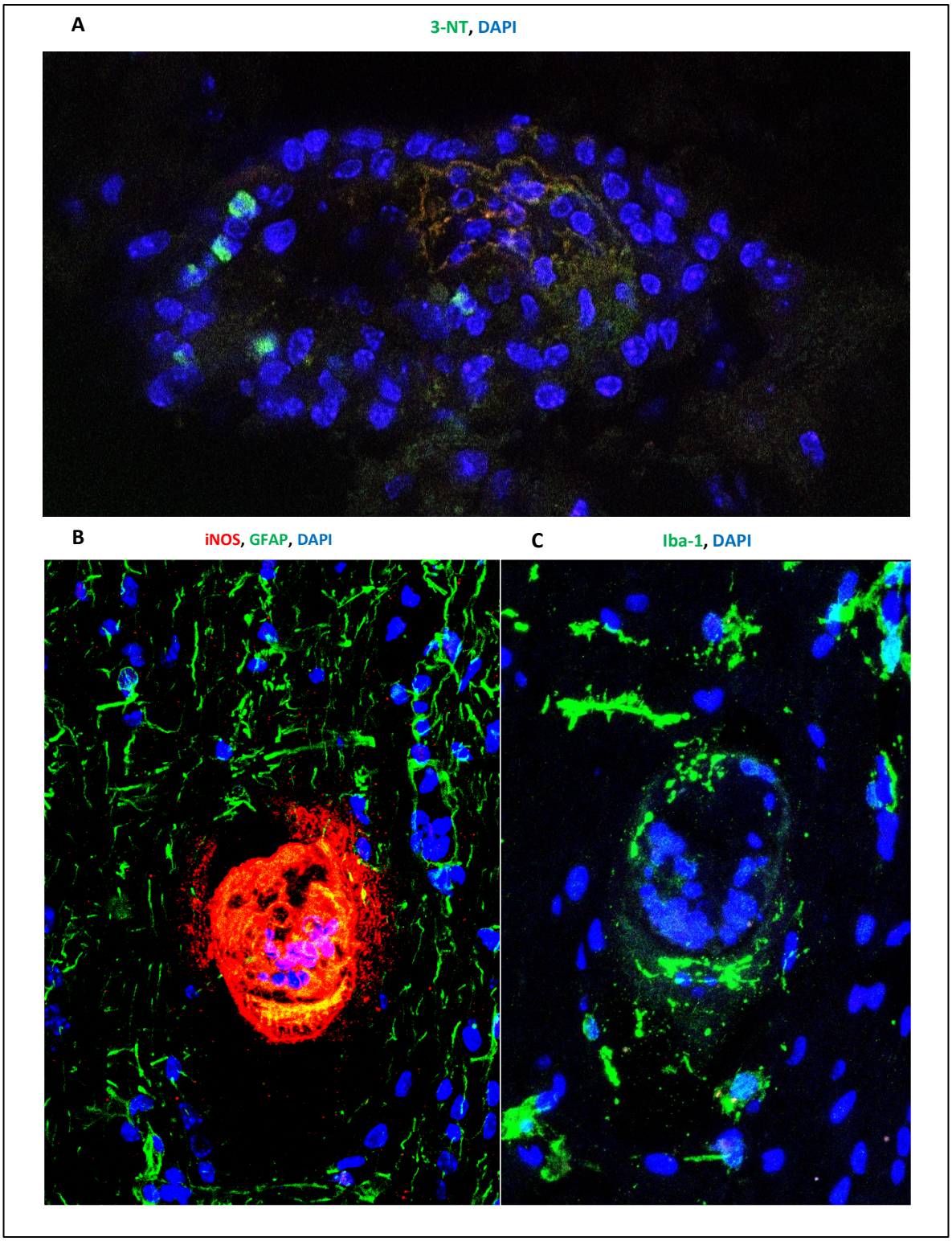

Figure S1: A: *Colocalization of 3-NT (green) signal with DAPI (blue).* B, C: *Colocalization of iNOS (red) signal with GFAP (marker of astrocytes, green) and DAPI (blue) (B) and subsequent lamina of spinal cord with marked Iba-1 (marker of microglia, green) and DAPI (blue) (C).*

Supplement 2: Nitrite/nitrate levels in sera after AG treatment

Nitrite/nitrate levels in sera measured using Griess reaction show NO levels on a systemic level. This minor experiment served as a control of NO production in mice included in experiment testing the AG effect on *T. regenti* infection in mice. The trend observed in Figure S1 is very similar to the trend shown in Figure 2.

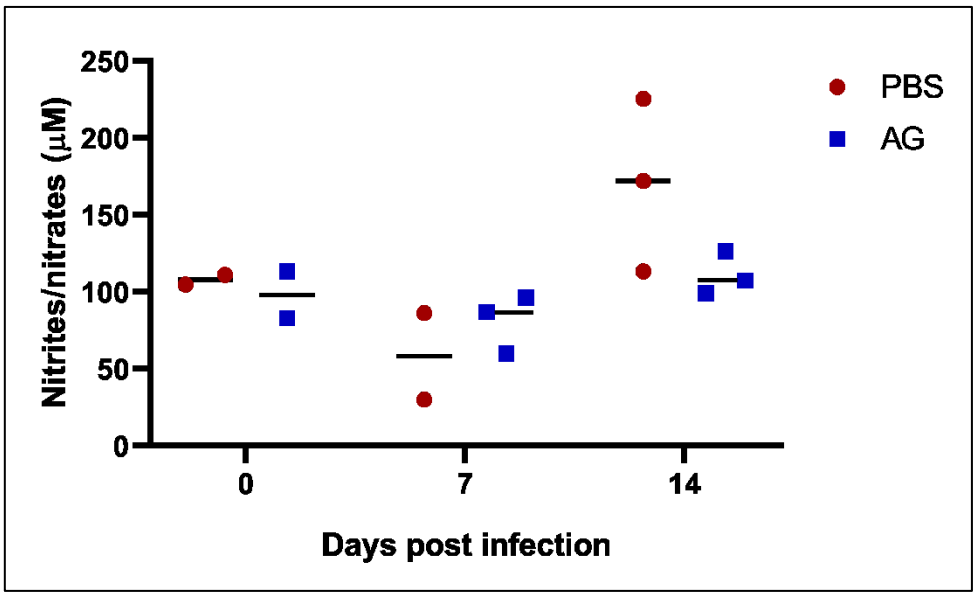

Figure S2: Nitrite/nitrate levels measured by Griess reaction in sera obtained from T. regenti *infected mice with AG injections (blue) and control PBS (red) injections at 0, 7 and 14 days post infection.*

Supplement 3: Parasite burden after AG treatment

After NO production impairment by AG-treatment, schistosomula burden was established in segments of spinal cord (cervical, thoracic, lumbar and sacral) and areas of spinal cord (grey matter, white matter, border of grey and white matter, submeningeal area). This analysis was performed only on subset of schistosomula-positive slides that were stained for MBP. Table S1 shows the detailed overview of parasite burden with respect both to spinal cord segment and localization, summary data are presented in Table 9.

Table S1: Summary of parasite burden in both segments and areas of spinal cord at 7 and 14 dpi with AG and PBS injections. Abbreviations: dpi – days post infection; gm – grey matter; wm – white matter; gm/wm – border of white and grey matter; sm – submeningeal area.

Spinal cord segment	**Area**	**No. of stained schistosomula**			
		7 dpi		**14 dpi**	
		PBS	**AG**	**PBS**	**AG**
Cervical	**gm**	0	0	0	1
	wm	0	1	2	1
	gm/wm	2	0	1	0
	sm	0	0	1	0
Thoracic	**gm**	1	0	0	1
	wm	5	3	5	3
	gm/wm	0	1	3	0
	sm	0	1	1	4
Lumbar	**gm**	0	0	0	0
	wm	1	1	2	3
	gm/wm	0	1	0	0
	sm	0	1	0	1