Supplementary material

Table S1. The pathogenic properties of *Acanthamoeba* sp. (AM22, T16 genotype) re-isolated from multiple organs of immunocompetent and immunosuppressed mice at 8, 16, and 24 days post-infection (dpi). A, immunocompetent *Acanthamoeba* sp.-infected mice; AS, immunosuppressed *Acanthamoeba* sp.-infected mice. No.- consecutive mouse number; intensity of infection was expressed on a scale 0-2: absence (0= -) and occurrence (1=+ (some trophozoites), 2=++ (considerable increase)) of developmental stages of *Acanthamoeba* sp.

No.	Organ	8 dpi		16 dpi		24 dpi		No.	Organ	8 dpi		16 dpi		24 dpi	
		A	AS	A	AS	A	AS			A	AS	A	AS	A	AS
	Brain	++	-	++	++	-	++		Brain	++	++	+	-	++	-
	Kidneys	+	-	+	+	-	+		Kidneys	-	+	+	-	+	-
	Heart	+	-	+	+	-	+		Heart	+	++	+	-	+	-
	Lungs	++	-	++	++	-	++		Lungs	+	++	+	-	++	-
1	Liver	++	-	+	+	-	+	**6**	Liver	+	++	+	-	++	-
	Spleen	++	-	+	+	-	+		Spleen	+	++	+	-	++	-
	Eyeballs	+	-	++	++	-	++		Eyeballs	+	++	+	-	+	-
	Optic nerve	+	-	+	+	-	+		Optic nerve	+	++	+	-	+	-
	Thyroid	-	-	+	+	-	+		Thyroid	-	-	-	-	-	-
	Brain	++	-		++	++	++		Brain	++	-	++	++	++	++
	Kidneys	+	-		+	+	+		Kidneys	+	-	++	+	++	+
	Heart	+	-		-	-	+		Heart	+	-	+	+	+	+
	Lungs	++	-		++	++	++		Lungs	++	-	+	++	++	++
2	Liver	++	-	died	++	++	+	**7**	Liver	-	-	++	++	++	+
	Spleen	++	-		++	++	+		Spleen	+	-	++	+	++	+
	Eyeballs	++	-		++	+	+		Eyeballs	+	-	++	+	++	+
	Optic nerve	+	-		++	+	+		Optic nerve	+	-	+	+	+	+
	Thyroid	-	-		+	+	-		Thyroid	-	-	+	-	-	-
	Brain	++	-	-	-	++	++		Brain	-	++	+	-	+	-
	Kidneys	+	-	-	-	+	+		Kidneys	-	+	+	-	+	-
	Heart	+	-	-	-	+	+		Heart	-	+	+	-	+	-
	Lungs	++	-	-	-	++	++		Lungs	-	++	+	-	+	-
3	Liver	++	-	-	-	++	+	**8**	Liver	-	+	+	-	+	-
	Spleen	++	-	-	-	++	+		Spleen	-	+	+	-	+	-
	Eyeballs	++	-	-	-	+	++		Eyeballs	-	+	+	-	+	-
	Optic nerve	+	-	-	-	+	+		Optic nerve	-	+	+	-	+	-
	Thyroid	+	-	-	-	+	+		Thyroid	-	-	-	-	-	-
	Brain	-	++	-	++	++	-		Brain	-	+		++	-	++
	Kidneys	-	+	-	+	+	-		Kidneys	-	-		+	-	+
	Heart	-	+	-	-	+	-		Heart	-	-		+	-	+
	Lungs	+	++	-	++	++	-		Lungs	-	++		++	-	++
4	Liver	-	++	-	-	++	-	**9**	Liver	-	-	died	+	-	+
	Spleen	-	++	-	-	++	-		Spleen	-	+		+	-	+
	Eyeballs	-	++	-	+	+	-		Eyeballs	-	+		+	-	+
	Optic nerve	-	+	-	+	+	-		Optic nerve	-	+		+	-	+
	Thyroid	-	+	-	-	+	-		Thyroid	-	-		-	-	+
	Brain	++	++	+	-	-	++		Brain	+	-	-	++	+	++
	Kidneys	+	+	+	-	-	+		Kidneys	+	-	-	+	-	+
	Heart	++	+	+	-	-	+		Heart	+	-	-	+	+	+
	Lungs	++	++	+	-	-	++		Lungs	+	-	-	++	+	++
5	Liver	+	++	+	-	-	++	**10**	Liver	-	-	-	+	-	++
	Spleen	++	++	+	-	-	++		Spleen	-	-	-	+	-	++
	Eyeballs	+	++	+	-	-	+		Eyeballs	-	-	-	+	-	++
	Optic nerve	+	+	+	-	-	+		Optic nerve	-	-	-	+	-	+
	Thyroid	+	+	-	-	-	+		Thyroid	-	-	-	-	-	++

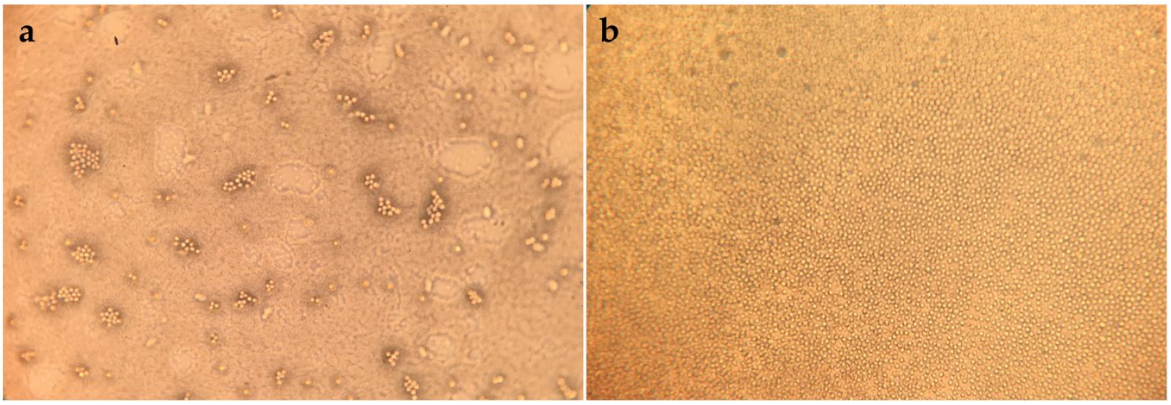

Figure S1. Selected microscope images showing developmental stages of *Acanthamoeba* sp. isolated from mouse organs. These images are for illustrative purposes only and do not include a scale bar, as the focus is on visualizing general morphology rather than precise measurements. (a) images taken on day 5 of culture observation; (b) images taken on day 10 of culture observation.