

Supplemental Information

Baricitinib treatment resolves lower-airway macrophage inflammation and neutrophil recruitment in SARS-CoV-2-infected rhesus macaques

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Table S1. Macaque characteristics and treatment group, Related to Figure 1. Animal ID in manuscript and assignment. Age in months and weight at time of infection. Treatment group assignment. The four uninfected control animals were historical samples that were only used for IHC staining in **Figure S2**. Annotated symbol in figures.

Animal ID	Animal Name	Sex	Age (months) at Infection	Weight (kgs) at Infection	Treatment	Annotated Symbol
RM1	RAAt11	M	166	10.98	Baricitinib	○
RM2	RLf10	M	201	12.96	Baricitinib	□
RM3	RVf12	F	155	9.63	Baricitinib	△
RM4	7_141	F	155	9.51	Baricitinib	◇
RM5	06_112	F	167	8.71	Untreated	●
RM6	RQv9	M	204	14.86	Untreated	■
RM7	5_215	F	176	8.44	Untreated	▲
RM8	RHz12	M	141	11.77	Untreated	◆
	P378	F	36-60	8.71	Uninfected	●
	P377	F	36-60	14.86	Uninfected	■
	P376	F	36-60	8.44	Uninfected	▲
	P375	M	36-60	11.77	Uninfected	◆

Table S2, Cage-side assessment scoring sheet, Related to Figure 1. The table was modified from a previous NHP influenza A virus study to include cage-side assessments relevant to COVID-19 and respiratory rates for cynomolgus macaques. The highest sum of scores for an animal determined the severity of disease. Disease severity was classified as no illness (0-4), mild (5-9), moderate (10-15), severe (>16). BPM = breaths per minute.

Cage-Side Assessment			
Parameter	Description	Score	
Responsiveness and recumbency	Normal - bright, alert, responsive	0	
	Mild - slightly depressed, acts disinterested when personnel in room, lying down in cage but gets up when approached	2	
	Moderate/obtunded - non-responsive, very disinterested in personnel, hunched or lying down, will get up when prodded, pinched, or similarly stimulated	4	
	Severe/comatose - lying down completely unresponsive to stimuli	6	
Discharges	Nasal or ocular	2	
	Nasal and ocular	4	
Skin	Rash	1	
Respiration, dyspnea, and cough	Normal - no apparent changes in breathing, 30-54 BPM, and no cough	0	
	Mild - slightly increased effort breathing, 55-65 BPM, or mild cough	2	
	Moderate - obvious difficulty breathing, 66-80 BPM, or apparent cough	4	
	Severe - respirations labored, open mouth breathing, abdominal breathing, >80 BPM, cyanosis, or haemoptysis	6	
Food consumption	100% of chow and enrichment food consumed	0	
	10-25% of chow remaining	1	
	25-50% of chow remaining, possibly some enrichment food remaining	2	
	>50% of chow remaining, some or all enrichment food remaining	3	
	Normal	0	

Fecal consistency	Soft	1	
	Fluid	2	
	Fluid and profuse amount	3	
Total			
Notes <i>(any observed sneezing, vomit, conjunctival erythema, or other abnormalities)</i>			

Table S3. Physical examination under anesthesia scoring criteria, Related to Figure 1.

Physical examinations were performed whenever an animal was anesthetized. The highest sum of scores for an animal determined the severity of disease. Disease severity was classified as no illness (0-2), mild (3-7), moderate (8-13), severe (>13). BPM = breaths per minute.

Physical Examination Under Anesthesia			
Parameter	Description	Score	
Rectal temperature (taken immediately after sedation)	Normal (37.0-38.9C)	0	
	Low grade fever (39-39.5C)	2	
	Fever (>39.5C)	4	
Heart rate and blood pressure	Normal (** BPM, **/**)	0	
	Mild tachycardia (** BPM), normotensive	1	
	Moderate tachycardia (** BPM), normotensive	2	
	Severe tachycardia (** BPM), hypotensive (**/**)	3	
Respiratory rate	Normal - 30-54 BPM	0	
	Mild tachypnea- 55-65 BPM	2	
	Moderate tachypnea - 66-80 BPM	4	
	Severe tachypnea - >80 BPM	6	
SpO ₂	Normal (95-100%)	0	
	Mildly decreased (90-94%)	1	
	Moderately decreased (87-89)	2	
	Severely decreased (<87)	3	
	Normal (0-3% loss)	0	

Body weight	Mild (4-9% loss)	1	
	Moderate (10-16% loss)	2	
	Severe (>16% loss)	3	
Dehydration	Normal skin turgor, moist mucous membranes	0	
	Skin tenting or dry mucous membranes	1	
	Skin tenting and dry mucous membranes	2	
	Skin tenting, dry mucous membranes, and sunken eyes	3	
Total			
Notes (<i>auscultation findings if applicable, conjunctival erythema, palpable masses, or any other abnormalities</i>)			