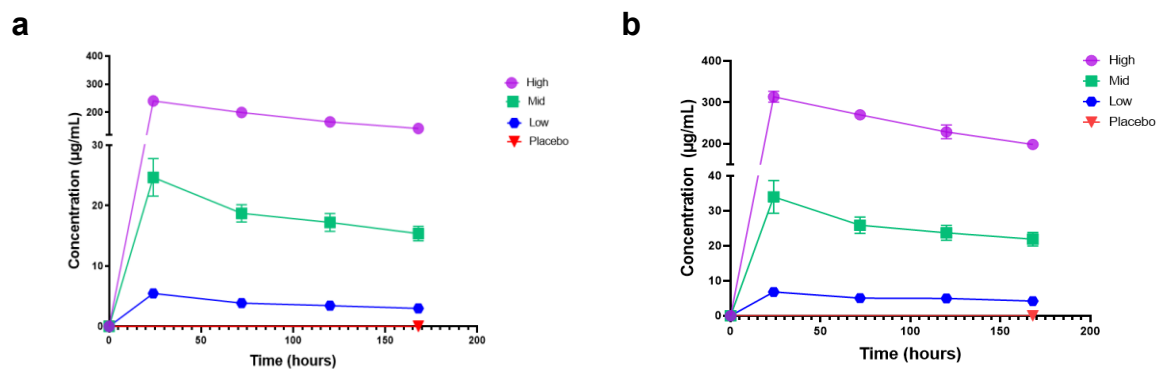
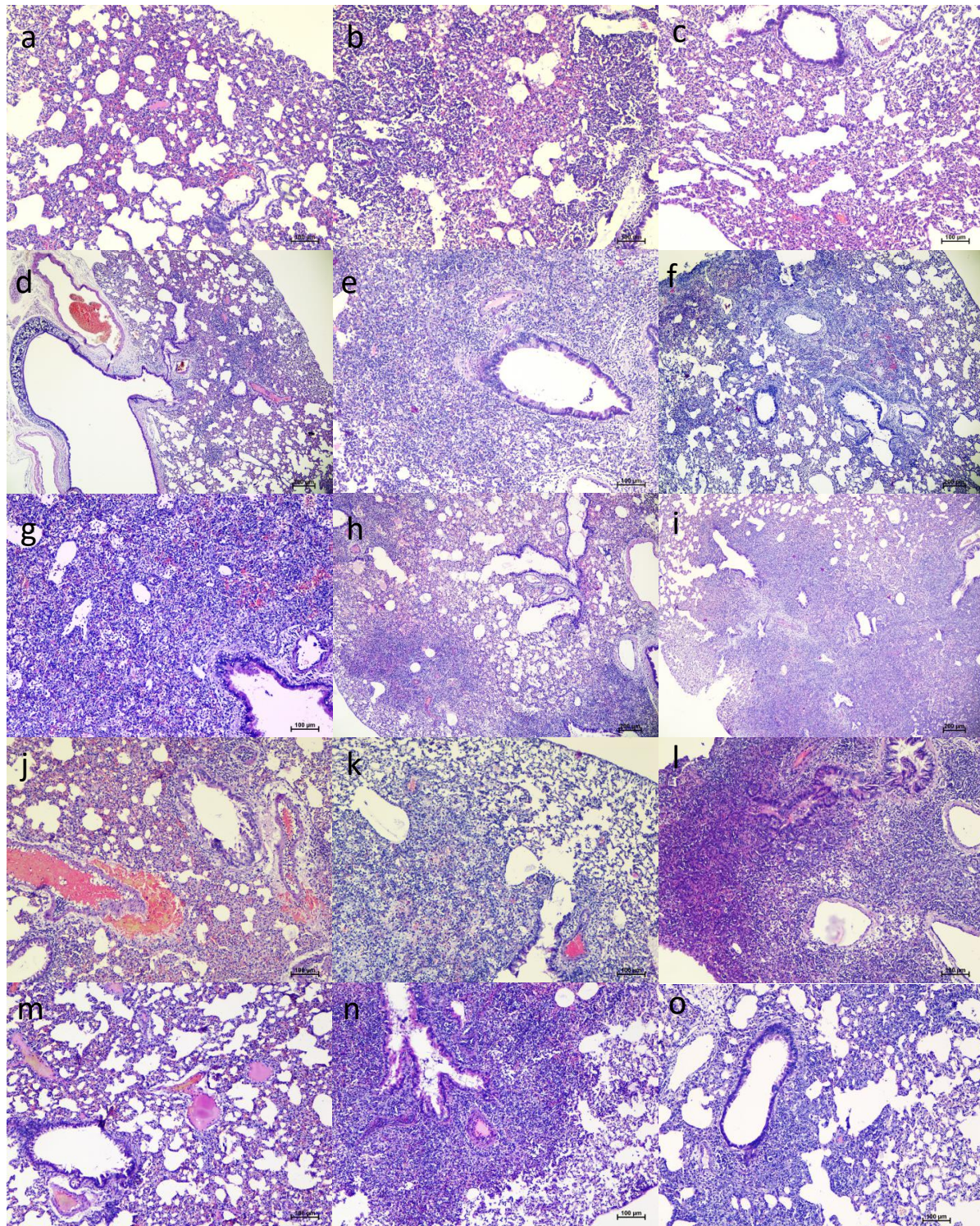


## Supplementary data



**Supplementary Figure S1: Pharmacokinetic study of ZRC3308 cocktail in Syrian hamsters.** **a.** Pharmacokinetic profile of ZRC3308-A7 in hamster serum for the 50 mg/kg, 5 mg/kg, 1 mg/kg and placebo. **b.** Pharmacokinetic profile of ZRC3308-B10 in hamster serum for the 50 mg/kg, 5 mg/kg, 1 mg/kg and placebo.

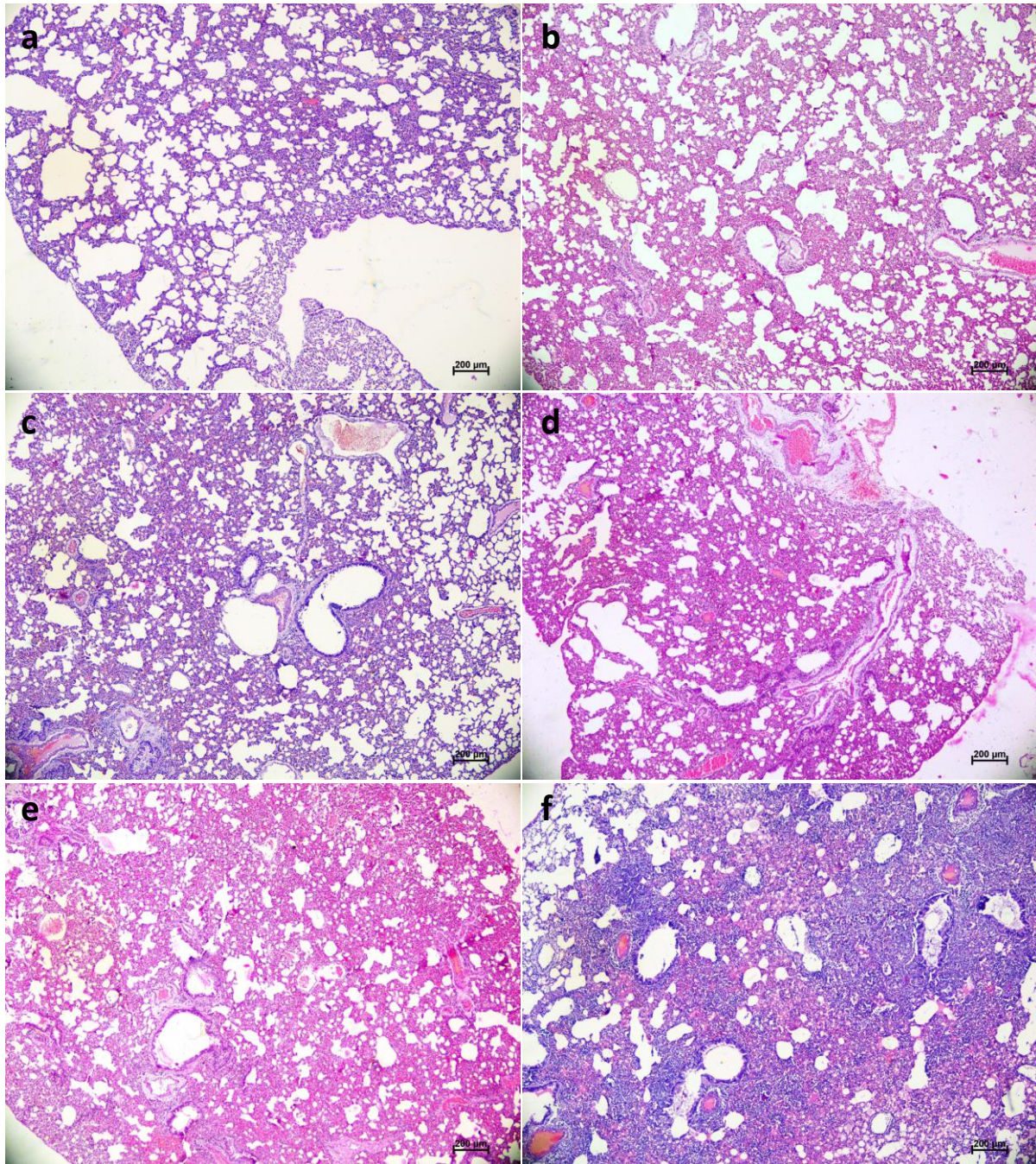




**Supplementary Figure S2: Histopathological changes in lungs of hamsters which received mAb therapy 24 hours post infection.** Lungs of placebo group (a) on 3DPI showing congestion and focal area of consolidation, (b) on 5 DPI showing extensive areas of congestion septal thickening and (c) on 7 DPI showing consolidation and congestion. Lungs of 50 mg/kg dose prophylactic group (d) on 3DPI showing congestion and focal area of infiltration (e) on 5DPI showing diffuse mononuclear infiltration, pneumocyte hyperplasia and exudative changes and (f) on 7DPI showing peri bronchial mononuclear infiltration and haemorrhages. Lungs of 5mg/kg dose group on (g) 3 DPI showing haemorrhages, (h) 5 DPI showing alveolar exudative changes, multifocal areas of mononuclear



infiltration and (i) on 7 DPI showing diffuse mononuclear infiltration. Lungs of 1 mg/kg dose group on (j) on 3DPI showing severely congested vessels, (k) on 5DPI showing congestion and foci alveolar septal thickening with pneumocyte hyperplasia. and (l) 7DPI showing diffuse alveolar damage. Lungs of the isotype antibody control group on (m) 3 DPI showing severe congestion (n) on 5DPI showing peri bronchial mononuclear infiltration and on (o) 7 DPI showing infiltration in the peri bronchial area and collapse of surrounding alveoli.



**Supplementary Figure S3: Histopathological changes in lungs of hamsters which received mAb therapy 6 hours post infection.** Lungs of 50mg/kg dose group (a) on 3DPI showing mild congestion (b) on 5 DPI showing congestion and atelectasis. Lungs of 5 mg/kg dose group (c) on 3DPI showing congestion and focal area of infiltration and (d) on 5DPI showing severe congestion, consolidative changes and focal mononuclear infiltration. Lungs of placebo group showing (e) haemorrhage,

congestion and exudative changes on 3DPI and **(f)** on 5 DPI showing diffuse mononuclear infiltration, congestion, pneumocyte hyperplasia and consolidation.

**Supplementary Table S1. Pharmacokinetic parameters of ZRC3308 cocktail.**

The pharmacokinetic profile of ZRC-3308A7 and ZRC-3308B10 mAbs in the hamster serum at T<sub>max</sub> of 24 hours.

Dose (mg/kg)		ZRC3308-A7			ZRC3308-B10		
		C <sub>max</sub> (µg/mL)	AUC <sub>last</sub> (h*µ/mL)	AUC <sub>ifn_obs</sub> (h*µg/mL)	C <sub>max</sub> (µg/mL)	AUC <sub>last</sub> (h*µ/mL)	AUC <sub>ifn_obs</sub> (h*µg/mL)
0.5	N	4	4	4	4	4	4
	Mean	5.47	619.29	1470.99	6.82	828.74	2226.37
	SD	0.54	29.84	187.91	0.76	42.72	286.69
2.5	N	5	5	5	5	5	5
	Mean	24.67	2983.02	8521.71	33.99	4130.48	14129.56
	SD	3.11	234.55	1714.57	4.67	360.43	3277.83
25	N	5	5	5	5	5	5
	Mean	240.4	29624.06	72933.74	313.48	39974.5	103423.03
	SD	7.19	1258.91	13487.96	13.34	1792.82	13754.51

\*T<sub>max</sub> reported as median

# One animal in 0.5 mg/kg has been excluded from analysis as no drug could be detected which may be due to dosing error

**Supplementary Table S2: Serum concentration of monoclonal antibody post virus infection at 3, 5 and 7 days**

Group	Days post infection	50mg/kg dose		5 mg/kg dose		1 mg/kg dose	
		ZRC-3308- A7 Concentration (mg/ml)	ZRC-3308- B10 Concentration (mg/ml)	ZRC-3308- A7 Concentration (mg/ml)	ZRC-3308- B10 Concentration (mg/ml)	ZRC-3308- A7 Concentration (mg/ml)	ZRC-3308- B10 Concentration (mg/ml)
Prophylactic	3	0.461	0.616	0.133	0.117	0.005	0.002
		0.368	0.422	0.139	0.127	0.006	0.002
		0.372	0.435	0.14	0.129	0.006	0.002
		0.414	0.515	0.136	0.123	0.005	0.002
	5	0.344	0.386	0.124	0.101	0.004	0.002
		0.343	0.386	0.122	0.098	0.004	0.002
		0.405	0.507	0.111	0.076	0.004	0.002
		0.369	0.443	0.122	0.1	0.004	0.002
	7	0.352	0.424	0.122	0.104	0.004	0.002
		0.369	0.448	0.12	0.108	0.004	0.002
		0.351	0.415	0.117	0.087	0.004	0.002
		0.397	0.512	0.119	0.101	0.003	0.002
Therapeutic (24 hours)	3	0.538	0.81	0.182	0.206	0.009	0.015
		0.366	0.418	0.146	0.139	0.008	0.012
		0.469	0.674	0.151	0.149	0.003	0.002
		0.494	0.669	0.141	0.132	0.008	0.011
	5	0.472	0.625	0.141	0.132	0.006	0.008
		0.512	0.722	0.13	0.11	0.006	0.009
		0.507	0.718	0.137	0.126	0.005	0.008
		0.223	0.155	0.141	0.134	0.006	0.009
	7	0.391	0.476	0.114	0.092	0.004	0.003
		0.223	0.161	0.119	0.1	0.004	0.003
		0.456	0.603	0.128	0.123	0.004	0.003
		0.431	0.614	0.118	0.098	0.004	0.004
Therapeutic (6 hours)	3	0.461	0.616	0.133	0.117		
		0.368	0.422	0.139	0.127		
		0.372	0.435	0.14	0.129		
	5	0.344	0.386	0.124	0.101		
		0.343	0.386	0.122	0.098		
		0.405	0.507	0.111	0.076		