

*Supplementary material*

## Phenotypic and Transcriptional Changes of Pulmonary Immune Responses in Dogs Following Canine Distemper Virus Infection

Elisa Chludzinski<sup>1,4</sup>, Johanna Klemens<sup>1</sup>, Małgorzata Ciurkiewicz<sup>1</sup>, Robert Geffers<sup>2</sup>, Pauline Pöpperl<sup>1,4</sup>, Melanie Stoff<sup>1</sup>, Dai-Lun Shin<sup>3</sup>, Georg Herrler<sup>3,\*</sup>, Andreas Beineke<sup>1,4,\*</sup>

<sup>1</sup>Department of Pathology, University of Veterinary Medicine Hannover, 30559 Hannover, Germany

<sup>2</sup>Genome Analytics, Helmholtz Centre for Infection Research, 38124 Braunschweig, Germany

<sup>3</sup>Institute of Virology, University of Veterinary Medicine Hannover, 30559 Hannover, Germany

<sup>4</sup>Center for Systems Neuroscience (ZSN), 30559 Hannover, Germany

\*Both authors have contributed equally last (G.H., A.B.)

### Supplementary material:

**This file includes:** Supplementary Tables S3-S4

**Supplementary Table S3.** Anamnestic details of dogs used for evaluation of FFPE tissue

Dog No	CDV status	Group	Age [months]	Sex	Breed	Mode of death
1	non-infected	1	4.5	n.d.	Beagle	E
2	non-infected	1	4.5	n.d.	Beagle	E
3	non-infected	1	4.5	n.d.	Beagle	E
4	non-infected	1	136.0	f	Beagle	E
5	non-infected	1	n.d.	sf	Rhodesian Ridgeback	S
6	non-infected	1	109.0	sf	Bolonka Zwetna	E
7	non-infected	1	2	f	Greater Swiss Mountain Dog	E
8	CDV <sup>+</sup>	2	24.0	m	Mixed breed	E
9	CDV <sup>+</sup>	2	5.5	m	Old English Sheepdog	S
10	CDV <sup>+</sup>	2	3.0	w	Mixed breed	n.d.
11	CDV <sup>+</sup>	2	72.0	m	Mixed breed	E
12	CDV <sup>+</sup>	2	n.d.	f	n.d.	n.d.
13	CDV <sup>+</sup>	2	3.0	w	Mixed breed	n.d.
14	CDV <sup>+</sup>	2	6.0	w	Mixed breed	S
15	CDV <sup>+</sup>	2	n.d.	f	Mixed breed	n.d.
16	CDV <sup>+</sup>	2	3.0	m	Mixed breed	E
17	CDV <sup>+</sup>	2	3.5	f	Jack Russell Terrier	E
18	CDV <sup>+</sup>	2	3.0	f	English Bulldog	E

Dog No	CDV status	Group	Age [months]	Sex	Breed	Mode of death
19	CDV <sup>+</sup>	2	2.0	f	Mixed breed	E
20	CDV <sup>+</sup>	2	n.d.	f	n.d.	S
21	CDV <sup>+</sup>	2	17.0	sf	Mixed breed	E
22	CDV <sup>+</sup>	2	6.0	f	n.d.	E
23	CDV <sup>+</sup>	3	n.d.	n.d.	German Shepherd	n.d.
24	CDV <sup>+</sup>	3	4.0	m	German Shepherd	n.d.
25	CDV <sup>+</sup>	3	n.d.	n.d.	n.d.	n.d.
26	CDV <sup>+</sup>	3	3.0	f	Dachshund	S
27	CDV <sup>+</sup>	3	6.0	sf	Mixed breed	n.d.
28	CDV <sup>+</sup>	3	2.0	f	Labrador Retriever	E
29	CDV <sup>+</sup>	3	2.0	m	Mixed breed	E
30	CDV <sup>+</sup>	3	6.0	m	Mixed breed	S
31	CDV <sup>+</sup>	3	3.0	m	Shih Tzu	S
32	CDV <sup>+</sup>	3	5.0	f	Chihuahua	S
33	CDV <sup>+</sup>	3	4.0	f	Mixed breed	E
34	CDV <sup>+</sup>	4	4.0	f	Dachshund	n.d.
35	CDV <sup>+</sup>	4	24.0	f	Mixed breed	n.d.
36	CDV <sup>+</sup>	4	n.d.	m	German Shepherd	E
37	CDV <sup>+</sup>	4	6.0	f	German Shepherd	n.d.
38	CDV <sup>+</sup>	4	10.0	m	German Shepherd	n.d.
39	CDV <sup>+</sup>	4	8.0	f	Retriever	n.d.
40	CDV <sup>+</sup>	4	7.0	m	Mixed breed	E
41	CDV <sup>+</sup>	4	84.0	m	Miniature Pinscher	E
42	CDV <sup>+</sup>	4	12.0	f	Mixed breed	E
43	CDV <sup>+</sup>	4	12.0	sf	Mixed breed	S
44	CDV <sup>+</sup>	4	8.0	f	n.d.	E

Groups: 1 = non-infected controls; 2 = acute CDV infection; 3 = subacute CDV infection; 4 = subacute-chronic CDV infection; f = female; sf = spayed female; m = male; n.d. = no data; E = euthanasia; S = spontaneous death.

**Supplementary Table S4.** Anamnestic details of dogs used for RT-qPCR and RNA-Seq analysis

Dog No	CDV status	Group	Age [months]	Sex	Breed	Mode of death	RNA-Seq
1	non-infected	1	83	m	Dalmatian	E	X
2	non-infected	1	134	sf	Mixed breed	S	X
3	non-infected	1	n.d.	n.d.	n.d.	E	X
4	non-infected	1	178	f	Mixed breed	E	
5	non-infected	1	n.d.	n.d.	n.d.	E	
6	non-infected	1	2	f	Greater Swiss Mountain Dog	E	X
7	CDV <sup>+</sup>	2	5.5	m	Old English Sheepdog	E	
8	CDV <sup>+</sup>	2	n.d.	f	n.d.	n.d.	
9	CDV <sup>+</sup>	2	3.0	f	Mixed breed	E	X
10	CDV <sup>+</sup>	2	6.0	f	Mixed breed	S	X
11	CDV <sup>+</sup>	2	n.d.	f	Mixed breed	n.d.	
12	CDV <sup>+</sup>	2	3.5	f	Jack Russell Terrier	E	
13	CDV <sup>+</sup>	2	3.0	f	English Bulldog	E	X
14	CDV <sup>+</sup>	2	2.0	f	Mixed breed	E	X
15	CDV <sup>+</sup>	2	6.0	f	n.d.	E	X

Groups: 1 = non-infected controls; 2 = acute CDV infection; f = female; sf = spayed female; m = male; n.d. = no data; E = euthanasia; S = spontaneous death; X = used for RNA-Seq analysis (in addition to RT-qPCR).