Appendix 1: Clinical, Laboratory and Treatment Progress of Case over Entire Hospitalization

		Admission	D2	D3-4	D5-7	D8-11	D13-14	D14-17	D18	D19-20	D21	D22	D23	D24	D25	26-35	36-44	45-55
Clinical	**Hypothermia/Fever**	Yes	Yes							Yes								
	Shock		Yes	Yes	Yes													
	Multiorgan Failure		Yes	Yes	Yes													
	Rash						Limbs	Generalized	Fading									
Haematology	**Haemoglobin G/L (Normal 150-200)**	156		107														
	White cell x109/L (Normal [5-34])	5.9	2.5	2.9			10	10.4				10.7		15.1			10.5	
	Neutrophils x109/L (Normal [6-26])	4.1	1,2	0.4			7	7.2				6.4		10.6			5.7	
	Platelet x109/L (Normal[150-400])	386	26	16			124	low				155						
CRP	**CRP mg/L (Normal[<0.5])**	275	341					103.7								43	11	
CSF	**CSF WBC x106 (Normal [0-30])**	40*																
	CSF Neutrophil %	38																
	CSF RBC	170720*																
	CSF Glucose mmol/L (Normal [2.2-3.9])	5.5																
	CSF protein mg/L (Normal [200-400])	5973*																
Microbiology	**Blood Culture**	NG [A]	NG						NG			NG						
	ETT/BAL cultures		NG[B]	NG[B]		NG[B]				*Legionella* cultures and standard cultures sent	*Pseudomonas* & *Cupriavidus* spp identified from specimen taken D19	*Legionella* reported on sample from D19 *Cupriavidus* & *Pseudomonas* sensitivity released					*Legionella* serotype 6 confirmed	

Appendix to: Barton M, McKelvie V, Campigotto A, et al. Legionellosis following water birth in a hot tub in a Canadian neonate.
CMAJ 2017. doi: 10.1503/cmaj.170711.

Chest Imaging	**CXR**	R Upper Lobe Opacity	RUL &Bilateral infiltrates	ARDS picture				Extensive Lung Chages								Improving		
	CT scan								Necrotizing Pneumonia									
Ventilatory support	**FIO_2 (%)**	100	100	100	70	70	70	70	70	70	[C]**60**	[C]**50**	[C]**35**	[C]**35**	35	35	30	30
	PIP (cmH_20)					30	30	30	30	30	[C]**28**	[C]**28**	[C]**27**	[C]**27**	25	23		
	PEEP (cmH_20)					10	10	10	10	10	**10**	**10**	[C]**8**	[C]**8**	8	7		
	CPAP (cmH_20)																7	
	High-flow O_2 cannula L/min																	8
	Conventional ventilation				Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes		
	Oscillator	Yes	Yes	Yes														
	INO	INO	INO	INO	INO	INO	INO	INO		INO	INO							
Inotropes			Yes	Yes	Yes													
Antibiotic	**Ampicillin**	Ampicillin																
	Cefotaxime	Cefotaxime																
	Azithro		Azithro[D]	Azithro[D]	Azithro[D]					Azithro[E]	Azithro	Azithro	Azithro	Azithro	Azithro	Azithro	Azithro	
	Rifampin												Rifampin	Rifampin	Rifampin	Rifampin	Rifampin	
	Mero		Mero	Mero	Mero	Mero		Mero	Mero	Mero	Mero							
	Vanco		Vanco	Vanco	Vanco	Vanc			Vanco	Vanco	Vanco							
	Piperacillin-tazobactam											Piptazo	Piptazo	Piptazo	Piptazo	Piptazo	Piptazo	

Note: ARDS = acute respiratory distress syndrome, Azithro = Azithromycin, CPAP = continuous positive airway pressure, CRP = Creactive protein, CSF = cerebrospinal fluid, CT = computed tomography, CXR = chest radiograph, FIO_2 = fraction inspired oxygen, INO = inhaled nitric oxide, Mero = Meropenem, NG = no growth, PEEP = positive end-expiratory pressure, PIP = peak inspiratory pressure, Piptazo = piperacillin-tazobactam, RBC = red blood cell, RUL = right upper lobe, Vanco = Vancomycin, WBC = white blood cell.

*Bloody tap accounts for high red cell count and falsely elevated CSF WBC and CSF protein.

[A]At admission, blood CSF and urine culture were sterile.

[B]ETT culture failed to identify any pathogens despite a marked inflammatory response (3+ white cells).

[C]Notable improvement in ventilator settings noted 48–72 hours into high-dose azithromycin and preceded commencement of piperacillin-tazobactam, before this the infant required high pressures and higher FIO_2 despite Meropenem. Thereafter there was continued improvement while receiving triple therapy (azithromycin, rifampin and piperacillin-tazobactam).

[D]Azithromycin for this initial course was given at 10 mg/kg on day 1 then at 5 mg/kg/day for a 5-day course. Earlier improvement from oscillator to conventional ventilation and improvement in hemodynamic status coincided with combination of Meropenem, vancomycin and first course of azithromycin. Once azithromycin initial course was completed no further improvement noted and later deterioriation followed rash and fever.

[E]Azithromycin was given at 10 mg/kg/day for the entire prolonged course.