[redacted] YY

YY [redacted] is a 33-year-old mechanist who has been suffering from Systemic Lupus Erythematosus (SLE) since 1987. He progressed to end stage renal disease in 1987 and had been on maintenance haemodialysis. He is not on steroid. He has mild degree of pancytopenia. He usually has no urine output (due to end stage kidney failure)

He works and lives in a rented flat in Shenzhen 蛇口, China. He came down to Hong Kong for haemodialysis twice weekly.

On 15 March 2003, he presented to PWH ward 8C (renal unit) for regular haemodialysis. On arrival, he did not mention any specific symptoms. He charted his own temperature as 37°C. During the haemodialysis, he was noted to be unwell. On re-checking of his body temperature by the nursing staff, it was 38C. He admitted to some cough overnight, with some myalgia and arthralgia.

CXR revealed Right lower zone infiltrate. WCC was 1.9 (taken while on haemodialysis - transient leucopenia is a feature during haemodialysis). In view of the fever, chest x-ray change and his regular travel to Shenzhen, the differential diagnosis of atypical pneumonia was considered a possibility. He was therefore assessed by the infection control team and was admitted (cohorted) to Ward 8A as a suspected atypical pneumonia case. His WCC was re-checked later in the evening was 7.0 with lymphocyte count of 0.5.

He was commenced on Cefotaxime, levofloxacin and Oseltamivir.

His fever gradually subsided over the next 24 hours and he was afebrile by 4 pm of 17 March 2003. He remained afebrile till discharge.

There was also gradual resolution of the change of the RLZ region on the CXR.

On 18th March 2003, the result of the NPA was available, confirming influenza A.

On 19th March 2003, as he was afebrile, with almost complete resolution of the CXR changes and positive identification of influenza A from the NPA. He was discharged from Ward 8A.

According to the information given to us by the patient, he returned to his brother's flat late at Amoy Garden in the afternoon of 19th March 2003. He did not visit other part of Amoy Garden. He did not have any diarrhea on the 19th March.

He did have one bowel opening on the morning of 20th March, before taking the MTR and train back to Shenzhen.

He returned to work in Shenzhen on 20th and 21st March 2003. He returned to Hong Kong on Saturday 22nd March 2003. He was noted to be febrile again with some breathlessness. He was commenced on haemodialysis. He was admitted to PWH after the haemodialysis on 22nd March 2003.
CXR revealed infiltrate in both mid zones of the lung. He was admitted to ward 8D.

His condition deteriorated rapidly with severe hypoxia. There was rapid progression of the CXR changes, with increasing amount of infiltrate bilaterally. He was transferred to PWH ICU on 23rd March 2003 and required ventilation support on 24th March 2003.

Serology IgG antibody titre CoR was negative on 15/3/03
Serology IgG antibody titre CoR was 640 on 9/4/03

[redacted] YY

	YY	Investigations
Background	[redacted] is a 33-year-old mechanist who has Systemic Lupus Erythematosus (SLE) diagnosed since 1987 and progressed to end stage renal disease in 1987, put on maintenance haemodialysis. Work and live in a rented flat in Shenzhen 蛇口, China	Usually low WCC
15/ 3/2003	Turned up to ward 8C (Haemodialysis unit) for routine haemodialysis. Reported OK and charted own temp on record form as 37°C 2 hours into haemodialysis, found unwell by nursing staff. Recheck temp 38°C, admitted to some chills and rigors, but no cough, sputum, dyspnoea or diarrhea. Infection control measures stepped up (ensured all patients and staff wear mask). Seen by Dr. SF Lui, in view of travel history to China and CXR change, Diagnosis as atypical pneumonia. Referred to SARS team, admitted to bed 25 in ward 8A for the investigation of fever after dialysis	CXR performed: Rt lower zone pneumonia. <u>WCC</u> (1/3/03) 3.6 (Lymphocyte 28% = 1.0) (15/3/03 - 3pm) 1.9 (Lymphocyte 27% = 0.5) – this is while on HD which does reduce WCC temporarily (15/3/03 - 8pm) 7.0 (Lymphocyte 9% = 0.6) Serology IgG antibody titre CoR <40 Other serology titre – negative
17/ 3/2003	Became afebrile within 48 hours after treatment with Cefotaxime, Levofloxacin and Oseltamivir,	**Rapid antigen test of nasopharyngeal aspirate was positive for Influenza A virus.**
(18/3/03 14:18)		WCC 2.3 (Lymphocyte 32% = 0.7)
19/3/03 (1500 Hr)	Discharged, stayed in his brother's place in Amoy Garden for that night Did not go out. No diarrhea.	
20/3/2003	Bowel opening for once on 20/3/03 Travel back to his rented apartment in Shenzhen in the morning, via MTR, Train	
21/3/2003	Working, No specific symptoms	
22/3/2003	Returned 8C for HD. Noted fever, productive cough, SOB on mild exertion. Admitted to 8D (Triage ward)	CXR Bilateral change, RLZ ++ consolidation,

23/3/2003	High fever, Afternoon: Increase SOB, desaturated SaO2 88% Transferred to ICU for observation XX Brother [redacted] had symptom on 23 Mar	
24/3/2003	Requried Intubated	CXR change ++
25/3/03	U V	U
26/3/2003	8C RN [redacted] and [redacted] developed fever and admitted, managed as SARS	?? contracted during the HD session on 22/3 ([redacted] had been nurse him for 2 HD sessions in total), no other staff affected.
9/4/2003		Serology IgG antibody titre CoR 640
6/5/2003		Only +ve PCR reported (on stool) – all other sample are negative for RT-PCR

PPE for renal unit
15 Mar: surgical mask, glove on needling
19 Mar: surgical mask, water repellent gown
22 Mar: N95, gown, glove, cap, visor, shoe cover.