臺北市立聯合醫院
TAIPEI CITY HOSPITAL



ORIGINAL ARTICLE

A Clinical Characteristics of Coronavirus Diseases 2019 in China

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前言

- 2019/12，新冠肺炎病例在武漢開始
- 病原為包膜的RNA病毒，與之前流行的SARS-CoV分類上類似，命名為Severe Acute Respiratory syndrome Coronavirus 2 (SARS-CoV-2)
- 目前世界衛生組織已宣布新冠肺炎(Covid-19)為國際關注的突發公共衛生事件(public health emergency of international concern)
- 本文提供最新來自中國的臨床資料

研究方法：資料來源

- 本文搜集從2019/12/11至2020/1/29實驗室確認之住院新冠肺炎個案，截至2020/1/31的臨床資料
- 診斷方式根據WHO的準則
  - 在病人鼻或咽喉粘膜拭子中以高通量定序(High throughput sequencing)或是RT-PCR檢測為陽性
- 湖北以外的資料來自於中華人民共和國國家衛生健康委員會(National Health Commission)
- 湖北的資料則由三位來自廣州的專家於武漢金銀潭醫院取得

研究方法：資料內容

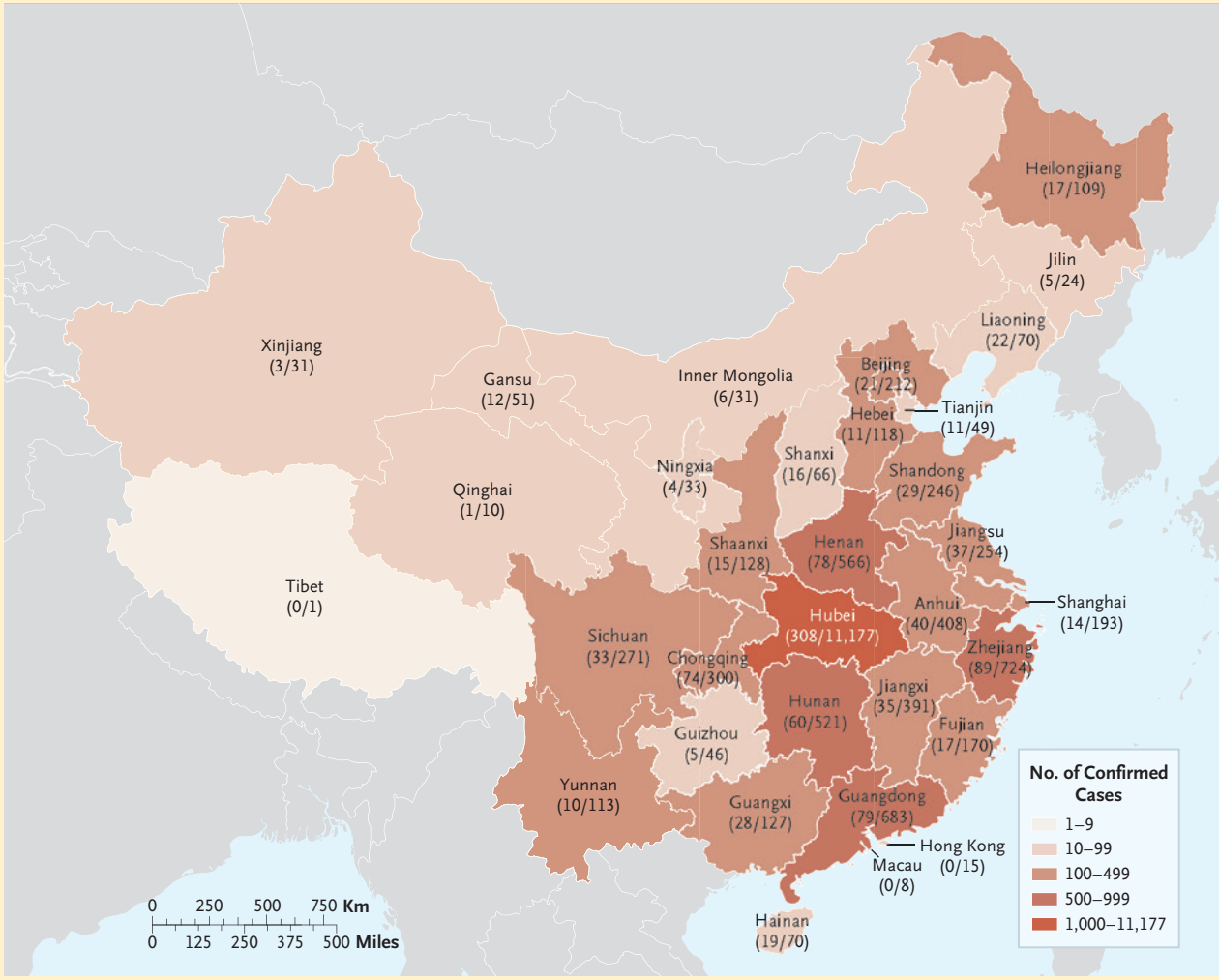
- 接觸史，臨床徵候
  - 發燒定義為腋溫>=37.5°C
- 檢驗數據
  - 血球計數，生化，凝血功能，肝腎功能，電解質，CRP，procalcitonin，LDH，CK
- 胸部X光以及電腦斷層
  - 是否有異常參考病歷
  - 若有電子檔則由搜集資料的胸腔科專家判定
- 新冠肺炎是否嚴重，則按照美國胸腔科醫學會對於社區型肺炎的準則
- 取得的數據的藉由副本拷貝，送至廣州國家衛生健康委員會的數據中心，由胸腔科的專家確認，補遺，輸入電腦
- SARS-CoV-2的檢驗利用RT-PCR在2020/1/23之前由中國CDC執行，之後則由認證的三級醫院完成

研究方法：結果

- 本研究最主要的複合型指標為加護病房入住，呼吸器使用或死亡
  - 其他指標包括死亡率，進展至各指標的時間
- 潛伏期(incubation period)
  - 從最早可能接觸病原至症狀開始的時間
  - 本研究的潛伏期計算源自291位清楚接觸史病患

結果

- 中國1/29之前確診有7736位病患
- 本研究取得1099(14.2%)
  - 最多來自武漢金銀潭醫院(132人)，
- 本研究包括了全中國可收治Covid-19的醫院的29.7%



中國至2/4的疫情地圖，各省中的分母代表確診數目，分子代表包括在本研究的個案數

- 研究個案，3.5%為醫療人員，15.7%嚴重患者
  - 非武漢居民中有72.3%接觸過武漢居民，包括31.3%曾造訪武漢，25.9%個案與武漢不相關
- **潛伏期為四天(四分位距：2-7)**

Table 1. Clinical Characteristics of the Study Patients, According to Disease Severity and the Presence or Absence of the Primary Composite End Point.*

Characteristic	All Patients (N=1099)	Disease Severity		Presence of Primary Composite End Point†	
		Nonsevere (N=926)	Severe (N=173)	Yes (N=67)	No (N=1032)
Age			嚴重者年齡較大		
Median (IQR) — yr	47.0 (35.0–58.0)	45.0 (34.0–57.0)	52.0 (40.0–65.0)	63.0 (53.0–71.0)	46.0 (35.0–57.0)
Distribution — no./total no. (%)	平均年齡47歲				
0–14 yr	15歲以下佔0.9% → 9/1011 (0.9)	8/848 (0.9)	1/163 (0.6)	0	9/946 (1.0)
15–49 yr	557/1011 (55.1)	490/848 (57.8)	67/163 (41.1)	12/65 (18.5)	545/946 (57.6)
50–64 yr	292/1011 (28.9)	241/848 (28.4)	51/163 (31.3)	21/65 (32.3)	271/946 (28.6)
≥65 yr	153/1011 (15.1)	109/848 (12.9)	44/163 (27.0)	32/65 (49.2)	121/946 (12.8)
Female sex — no./total no. (%)	459/1096 (41.9)	386/923 (41.8)	73/173 (42.2)	22/67 (32.8)	437/1029 (42.5)
Smoking history — no./total no. (%)	女性比例41.9%				
Never smoked	927/1085 (85.4)	793/913 (86.9)	134/172 (77.9)	44/66 (66.7)	883/1019 (86.7)
Former smoker	21/1085 (1.9)	12/913 (1.3)	9/172 (5.2)	5/66 (7.6)	16/1019 (1.6)
Current smoker	137/1085 (12.6)	108/913 (11.8)	29/172 (16.9)	17/66 (25.8)	120/1019 (11.8)
Exposure to source of transmission within past 14 days — no./total no.					
Living in Wuhan	武漢居民佔43.9% → 483/1099 (43.9)	400/926 (43.2)	83/173 (48.0)	39/67 (58.2)	444/1032 (43.0)
Contact with wildlife	野生動物接觸1.9% → 13/687 (1.9)	10/559 (1.8)	3/128 (2.3)	1/41 (2.4)	12/646 (1.9)
Recently visited Wuhan‡	193/616 (31.3)	166/526 (31.6)	27/90 (30.0)	10/28 (35.7)	183/588 (31.1)
Had contact with Wuhan residents‡	442/611 (72.3)	376/522 (72.0)	66/89 (74.2)	19/28 (67.9)	423/583 (72.6)
Median incubation period (IQR) — days§	4.0 (2.0–7.0)	4.0 (2.8–7.0)	4.0 (2.0–7.0)	4.0 (1.0–7.5)	4.0 (2.0–7.0)

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	All Patients (N=1099)	Disease Severity		Presence of Composite Primary End Point	
		Nonsevere (N=926)	Severe (N=173)	Yes (N=67)	No (N=1032)
Fever on admission					
Patients — no./total no. (%) 入院時43.8%發燒	473/1081 (43.8)	391/910 (43.0)	82/171 (48.0)	24/66 (36.4)	449/1015 (44.2)
Median temperature (IQR) — °C	37.3 (36.7–38.0)	37.3 (36.7–38.0)	37.4 (36.7–38.1)	36.8 (36.3–37.8)	37.3 (36.7–38.0)
Distribution of temperature — no./total no. (%)					
<37.5°C	608/1081 (56.2)	519/910 (57.0)	89/171 (52.0)	42/66 (63.6)	566/1015 (55.8)
37.5–38.0°C	238/1081 (22.0)	201/910 (22.1)	37/171 (21.6)	10/66 (15.2)	228/1015 (22.5)
38.1–39.0°C	197/1081 (18.2)	160/910 (17.6)	37/171 (21.6)	11/66 (16.7)	186/1015 (18.3)
>39.0°C	38/1081 (3.5)	30/910 (3.3)	8/171 (4.7)	3/66 (4.5)	35/1015 (3.4)
Fever during hospitalization					
Patients — no./total no. (%) 住院增至88.7%	975/1099 (88.7)	816/926 (88.1)	159/173 (91.9)	59/67 (88.1)	916/1032 (88.8)
Median highest temperature (IQR) — °C	38.3 (37.8–38.9)	38.3 (37.8–38.9)	38.5 (38.0–39.0)	38.5 (38.0–39.0)	38.3 (37.8–38.9)
<37.5°C	92/926 (9.9)	79/774 (10.2)	13/152 (8.6)	3/54 (5.6)	89/872 (10.2)
37.5–38.0°C	286/926 (30.9)	251/774 (32.4)	35/152 (23.0)	20/54 (37.0)	266/872 (30.5)
38.1–39.0°C	434/926 (46.9)	356/774 (46.0)	78/152 (51.3)	21/54 (38.9)	413/872 (47.4)
>39.0°C	114/926 (12.3)	88/774 (11.4)	26/152 (17.1)	10/54 (18.5)	104/872 (11.9)
Symptoms — no. (%)					
Conjunctival congestion	9 (0.8)	5 (0.5)	4 (2.3)	0	9 (0.9)
Nasal congestion	53 (4.8)	47 (5.1)	6 (3.5)	2 (3.0)	51 (4.9)
Headache	150 (13.6)	124 (13.4)	26 (15.0)	8 (11.9)	142 (13.8)
Cough 咳嗽第二常見(67.8%)	745 (67.8)	623 (67.3)	122 (70.5)	46 (68.7)	699 (67.7)
Sore throat	153 (13.9)	130 (14.0)	23 (13.3)	6 (9.0)	147 (14.2)
Sputum production	370 (33.7)	309 (33.4)	61 (35.3)	20 (29.9)	350 (33.9)
Fatigue	419 (38.1)	350 (37.8)	69 (39.9)	22 (32.8)	397 (38.5)
Hemoptysis	10 (0.9)	6 (0.6)	4 (2.3)	2 (3.0)	8 (0.8)
Shortness of breath	205 (18.7)	140 (15.1)	65 (37.6)	36 (53.7)	169 (16.4)
Nausea or vomiting 噁心，嘔吐，拉肚子不常見	55 (5.0)	43 (4.6)	12 (6.9)	3 (4.5)	52 (5.0)
Diarrhea	42 (3.8)	32 (3.5)	10 (5.8)	4 (6.0)	38 (3.7)
Myalgia or arthralgia	164 (14.9)	134 (14.5)	30 (17.3)	6 (9.0)	158 (15.3)
Chills	126 (11.5)	100 (10.8)	26 (15.0)	8 (11.9)	118 (11.4)
Signs of infection — no. (%)					
Throat congestion	19 (1.7)	17 (1.8)	2 (1.2)	0	19 (1.8)
Tonsil swelling	23 (2.1)	17 (1.8)	6 (3.5)	1 (1.5)	22 (2.1)
Enlargement of lymph nodes	2 (0.2)	1 (0.1)	1 (0.6)	1 (1.5)	1 (0.1)
Rash	2 (0.2)	0	2 (1.2)	0	2 (0.2)

- 疾病嚴重者
  - 年齡較大（中位數大七歲）
  - 有其他疾病比例較高(38.7% vs 21%)
  - 接觸史與輕症者類似

Characteristic	All Patients (N=1099)	Disease Severity		Presence of Primary Composite End Point†	
		Nonsevere (N=926)	Severe (N=173)	Yes (N=67)	No (N=1032)
Signs of infection — no. (%)					
Throat congestion	19 (1.7)	17 (1.8)	2 (1.2)	0	19 (1.8)
Tonsil swelling	23 (2.1)	17 (1.8)	6 (3.5)	1 (1.5)	22 (2.1)
Enlargement of lymph nodes	2 (0.2)	1 (0.1)	1 (0.6)	1 (1.5)	1 (0.1)
Rash	2 (0.2)	0	2 (1.2)	0	2 (0.2)
Coexisting disorder — no. (%)					
Any	261 (23.7)	194 (21.0)	67 (38.7)	39 (58.2)	222 (21.5)
Chronic obstructive pulmonary disease	12 (1.1)	6 (0.6)	6 (3.5)	7 (10.4)	5 (0.5)
Diabetes	81 (7.4)	53 (5.7)	28 (16.2)	18 (26.9)	63 (6.1)
Hypertension	165 (15.0)	124 (13.4)	41 (23.7)	24 (35.8)	141 (13.7)
Coronary heart disease	27 (2.5)	17 (1.8)	10 (5.8)	6 (9.0)	21 (2.0)
Cerebrovascular disease	15 (1.4)	11 (1.2)	4 (2.3)	4 (6.0)	11 (1.1)
Hepatitis B infection¶	23 (2.1)	22 (2.4)	1 (0.6)	1 (1.5)	22 (2.1)
Cancer‖	10 (0.9)	7 (0.8)	3 (1.7)	1 (1.5)	9 (0.9)
Chronic renal disease	8 (0.7)	5 (0.5)	3 (1.7)	2 (3.0)	6 (0.6)
Immunodeficiency	2 (0.2)	2 (0.2)	0	0	2 (0.2)

23.7%有其他疾病　嚴重者有其他疾病比例較高

- 86.2%患者的胸部電腦斷層異常，常見有
  - 毛玻璃樣變化(Ground-glass opacity)：56.4%
  - 雙側斑駁陰影(Bilateral patchy shadowing):51.8%
- 胸部X光與電腦斷層無異常會出現在17.9%的輕症患者，與2.9%的嚴重患者身上

Variable	All Patients (N=1099)	Disease Severity		Presence of Composite Primary End Point	
		Nonsevere (N=926)	Severe (N=173)	Yes (N=67)	No (N=1032)
Radiologic findings					
Abnormalities on chest radiograph — no./total no. (%)	162/274 (59.1)	116/214 (54.2)	46/60 (76.7)	30/39 (76.9)	132/235 (56.2)
Ground-glass opacity	55/274 (20.1)	37/214 (17.3)	18/60 (30.0)	9/39 (23.1)	46/235 (19.6)
Local patchy shadowing	77/274 (28.1)	56/214 (26.2)	21/60 (35.0)	13/39 (33.3)	64/235 (27.2)
Bilateral patchy shadowing	100/274 (36.5)	65/214 (30.4)	35/60 (58.3)	27/39 (69.2)	73/235 (31.1)
Interstitial abnormalities	12/274 (4.4)	7/214 (3.3)	5/60 (8.3)	6/39 (15.4)	6/235 (2.6)
Abnormalities on chest CT — no./total no. (%)	840/975 (86.2)	682/808 (84.4)	158/167 (94.6)	50/57 (87.7)	790/918 (86.1)
Ground-glass opacity	550/975 (56.4)	449/808 (55.6)	101/167 (60.5)	30/57 (52.6)	520/918 (56.6)
Local patchy shadowing	409/975 (41.9)	317/808 (39.2)	92/167 (55.1)	22/57 (38.6)	387/918 (42.2)
Bilateral patchy shadowing	505/975 (51.8)	368/808 (45.5)	137/167 (82.0)	40/57 (70.2)	465/918 (50.7)
Interstitial abnormalities	143/975 (14.7)	99/808 (12.3)	44/167 (26.3)	15/57 (26.3)	128/918 (13.9)

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Variable	All Patients (N=1099)	Disease Severity		Presence of Composite Primary End Point	
		Nonsevere (N=926)	Severe (N=173)	Yes (N=67)	No (N=1032)
Laboratory findings					
Median Pao_2:FIo_2 ratio (IQR)†	3.9 (2.9–4.7)	3.9 (2.9–4.5)	4.0 (2.8–5.2)	2.9 (2.2–5.4)	4.0 (3.1–4.6)
White-cell count					
Median (IQR) — per mm^3	4700 (3500– 6000)	4900 (3800–6000)	3700 (3000–6200)	6100 (4900– 11,100)	4700 (3500– 5900)
Distribution — no./total no. (%)					
>10,000 per mm^3	58/978 (5.9)	39/811 (4.8)	19/167 (11.4)	15/58 (25.9)	43/920 (4.7)
<4000 per mm^3	330/978 (33.7)	228/811 (28.1)	102/167 (61.1)	8/58 (13.8)	322/920 (35.0)
Lymphocyte count					
Median (IQR) — per mm^3	1000 (700–1300)	1000 (800–1400)	800 (600–1000)	700 (600–900)	1000 (700–1300)
Distribution — no./total no. (%)					
<1500 per mm^3	731/879 (83.2)	584/726 (80.4)	147/153 (96.1)	50/54 (92.6)	681/825 (82.5)
Platelet count					
Median (IQR) — per mm^3	168,000 (132,000–207,000)	172,000 (139,000–212,000)	137,500 (99,000–179,500)	156,500 (114,200–195,000)	169,000 (133,000–207,000)
Distribution — no./total no. (%)					
<150,000 per mm^3	315/869 (36.2)	225/713 (31.6)	90/156 (57.7)	27/58 (46.6)	288/811 (35.5)
Median hemoglobin (IQR) — g/dl‡	134.0 (119.0–148.0)	135.0 (120.0–148.0)	128.0 (111.8–141.0)	125.0 (105.0–140.0)	134.0 (120.0–148.0)
Distribution of other findings — no./total no. (%)					
C-reactive protein ≥10 mg/liter	481/793 (60.7)	371/658 (56.4)	110/135 (81.5)	41/45 (91.1)	440/748 (58.8)
Procalcitonin ≥0.5 ng/ml	35/633 (5.5)	19/516 (3.7)	16/117 (13.7)	12/50 (24.0)	23/583 (3.9)
Lactate dehydrogenase ≥250 U/liter	277/675 (41.0)	205/551 (37.2)	72/124 (58.1)	31/44 (70.5)	246/631 (39.0)
Aspartate aminotransferase >40 U/liter	168/757 (22.2)	112/615 (18.2)	56/142 (39.4)	26/52 (50.0)	142/705 (20.1)
Alanine aminotransferase >40 U/liter	158/741 (21.3)	120/606 (19.8)	38/135 (28.1)	20/49 (40.8)	138/692 (19.9)
Total bilirubin >17.1 μmol/liter	76/722 (10.5)	59/594 (9.9)	17/128 (13.3)	10/48 (20.8)	66/674 (9.8)
Creatine kinase ≥200 U/liter	90/657 (13.7)	67/536 (12.5)	23/121 (19.0)	12/46 (26.1)	78/611 (12.8)
Creatinine ≥133 μmol/liter	12/752 (1.6)	6/614 (1.0)	6/138 (4.3)	5/52 (9.6)	7/700 (1.0)
D-dimer ≥0.5 mg/liter	260/560 (46.4)	195/451 (43.2)	65/109 (59.6)	34/49 (69.4)	226/511 (44.2)
Minerals§					
Median sodium (IQR) — mmol/liter	138.2 (136.1–140.3)	138.4 (136.6–140.4)	138.0 (136.0–140.0)	138.3 (135.0–141.2)	138.2 (136.1–140.2)
Median potassium (IQR) — mmol/liter	3.8 (3.5–4.2)	3.9 (3.6–4.2)	3.8 (3.5–4.1)	3.9 (3.6–4.1)	3.8 (3.5–4.2)
Median chloride (IQR) — mmol/liter	102.9 (99.7–105.6)	102.7 (99.7–105.3)	103.1 (99.8–106.0)	103.8 (100.8–107.0)	102.8 (99.6–105.3)

嚴重病人的檢驗值較差

白血球低下33.7%

淋巴球低下83.2%

血小板低下36.2%

大多數CRP升高

- 1099個案全部完成追蹤，其中67人(6.1%)達到複合型指標，累積風險為3.6%
  - 5%入住加護病房
  - 2.3%需要呼吸器
  - 1.4%死亡
- 在173位嚴重病人中，43人(24.9%)達到複合型指標，累積風險為20.6%
- 共有204位病人接受類固醇治療，其中33人(16.2%)入住加護病房，17人(8.3%)接受侵襲式呼吸器，5人(2.5%)死亡
- 住院天數中位數為12天（平均為12.8天）

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Variable	All Patients (N=1099)	Disease Severity		Presence of Composite Primary End Point	
		Nonsevere (N=926)	Severe (N=173)	Yes (N=67)	No (N=1032)
Complications					
Septic shock — no. (%)	12 (1.1)	1 (0.1)	11 (6.4)	9 (13.4)	3 (0.3)
Acute respiratory distress syndrome — no. (%)	37 (3.4)	10 (1.1)	27 (15.6)	27 (40.3)	10 (1.0)
Acute kidney injury — no. (%)	6 (0.5)	1 (0.1)	5 (2.9)	4 (6.0)	2 (0.2)
Disseminated intravascular coagulation — no. (%)	1 (0.1)	0	1 (0.6)	1 (1.5)	0
Rhabdomyolysis — no. (%)	2 (0.2)	2 (0.2)	0	0	2 (0.2)
Physician-diagnosed pneumonia — no./total no. (%)	972/1067 (91.1)	800/894 (89.5)	172/173 (99.4)	63/66 (95.5)	909/1001 (90.8)
Median time until development of pneumonia (IQR) — days*					
After initial Covid-19 diagnosis	0.0 (0.0–1.0)	0.0 (0.0–1.0)	0.0 (0.0–2.0)	0.0 (0.0–3.5)	0.0 (0.0–1.0)
After onset of Covid-19 symptoms	3.0 (1.0–6.0)	3.0 (1.0–6.0)	5.0 (2.0–7.0)	4.0 (0.0–7.0)	3.0 (1.0–6.0)
Treatments					
Intravenous antibiotics — no. (%)	637 (58.0)	498 (53.8)	139 (80.3)	60 (89.6)	577 (55.9)
Oseltamivir — no. (%)	393 (35.8)	313 (33.8)	80 (46.2)	36 (53.7)	357 (34.6)
Antifungal medication — no. (%)	31 (2.8)	18 (1.9)	13 (7.5)	8 (11.9)	23 (2.2)
Systemic glucocorticoids — no. (%)	204 (18.6)	127 (13.7)	77 (44.5)	35 (52.2)	169 (16.4)
Oxygen therapy — no. (%)	454 (41.3)	331 (35.7)	123 (71.1)	59 (88.1)	395 (38.3)
Mechanical ventilation — no. (%)	67 (6.1)	0	67 (38.7)	40 (59.7)	27 (2.6)
Invasive	25 (2.3)	0	25 (14.5)	25 (37.3)	0
Noninvasive	56 (5.1)	0	56 (32.4)	29 (43.3)	27 (2.6)
Use of extracorporeal membrane oxygenation — no. (%)	5 (0.5)	0	5 (2.9)	5 (7.5)	0
Use of continuous renal-replacement therapy — no. (%)	9 (0.8)	0	9 (5.2)	8 (11.9)	1 (0.1)
Use of intravenous immune globulin — no. (%)	144 (13.1)	86 (9.3)	58 (33.5)	27 (40.3)	117 (11.3)
Admission to intensive care unit — no. (%)	55 (5.0)	22 (2.4)	33 (19.1)	55 (82.1)	0
Median length of hospital stay (IQR) — days†	12.0 (10.0–14.0)	11.0 10.0–13.0)	13.0 (11.5–17.0)	14.5 (11.0–19.0)	12.0 (10.0–13.0)
Clinical outcomes at data cutoff — no. (%)					
Discharge from hospital	55 (5.0)	50 (5.4)	5 (2.9)	1 (1.5)	54 (5.2)
Death	15 (1.4)	1 (0.1)	14 (8.1)	15 (22.4)	0
Recovery	9 (0.8)	7 (0.8)	2 (1.2)	0	9 (0.9)
Hospitalization	1029 (93.6)	875 (94.5)	154 (89.0)	51 (76.1)	978 (94.8)

1.1%Shock
3.4%ARDS
大多數病人，尤其是嚴重病人住院時都會有肺炎
嚴重病人較高比例左述治療
58%注射抗生素
35.8%克流感
18.6%類固醇
41.3%氧氣治療
6.1%呼吸器治療
0.5%葉克膜
住院天數中位數為12天

討論

- 新冠肺炎在臨床表現的變化很大，在爆發初期造成許多困難
  - 43.8%剛開始會發燒，但在住院後會升至88.7%
  - 嚴重患者佔15.7%
  - 無影像變化在輕症患者佔17.9%，嚴重患者佔2.9%
  - 8.9%的患者在不會有肺炎或在肺炎之前就被診斷
- 雖然新冠肺炎的死亡人數多，但其死亡率不及SARS以及MERS
  - 入院時的呼吸狀態差（嚴重病人），預後較差
- SARS-CoV-2的傳染途徑應為接觸或是飛沫傳染與SARS-CoV，MERS-CoV或流感類似
  - 在腸胃道，口水與尿液都可見到病毒，但這些路徑仍有待證實

- 臨床症狀上，新冠肺炎與SARS類似以發燒及咳嗽為主，腸胃道症狀不常見．但新冠肺炎不發燒的比例較SARS(1%)與MERS(2%)高，造成檢疫的困難
- 和之前的報告類似，淋巴球低下在新冠肺炎常見，但本研究的死亡率(1.4%)較之前報告低，可能與樣本數與收案條件不同有關
  - 但本研究的數據與國家的公開數據(至2/16，罹病51857人，死亡率3.2%)較類似
  - 由於更輕症的患者可能不會尋求醫療協助，實際死亡率可能更低

- 本研究的限制
  - 部分個案的接觸史與檢驗結果不完整，一些診所診斷的個案病歷記載與檢驗少，非專科醫院的設備與訓練不足，不同醫院的電子病例格式不同，研究時間緊迫
  - 潛伏期只能根據有記載的291為病例估算，個案回憶的不精確性會影響估算結果
  - 許多病人仍在住院當中，預後的計算會有影響
  - 無症狀或輕症患者在家治療，不會收入本研究當中(本研究的收案族群較為嚴重)
  - 由於醫療資源耗竭，很多病人在入院時並未進行細菌或是黴菌的檢測
  - 病人資料的產生還是以臨床醫師的選擇為主，並非系統性的研究

本文重點(Summary)

- 至目前為止最大的新冠肺炎(Covid-19)臨床追蹤報告，蒐集1099位個案，個案中達到嚴重肺炎的個案約有15.7%
- 臨床表現上，新冠肺炎以發燒(住院時88.7%)和咳嗽(67.8%)最為常見，腸胃道症狀較少
- 血液檢驗上，以淋巴球低下(83.2%)，CRP升高(60.7%)較多
- 影像上，86.2%的病人出現電腦斷層異常，以毛玻璃樣變化(Ground-glass opacity:56.4%)和雙側斑駁陰影(Bilateral patchy shadowing:51.8%)為主
- 研究顯示個案的臨床症狀差異極大，許多病人不會發燒，甚至不會有“肺炎”的影像表現，增加診斷的困難度