Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

can improve survival in patients with multiple myeloma. Results from most phase 3 trials are pending, and the optimal sequencing of the different treatments is unknown. In the meantime, before assigning treatment for a patient with multiple myeloma, clinicians should consider the features of the disease and the profile of the patient.

MVM has received honoraria from lectures and participation in boards from Janssen, Celgene, Takeda, Amgen, Oncopeptides, Adaptive, GlaxoSmithKline, AbbVie, Roche, and Seattle Genetics. VGC has received honoraria from lectures from Janssen and Celgene.

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Strategic plan for management of COVID-19 in paediatric haematology and oncology departments

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The 2019 novel coronavirus disease (COVID-19) is an outbreak of respiratory disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)—distinct from SARS-CoV and Middle East respiratory syndrome coronavirus (MERS-CoV).[1] As of March 31, 2020, a total of 787 010 cases have been confirmed and 37 829 deaths have been reported across 178 countries or regions.[2] A retrospective clinical study of the initial COVID-19 cases indicated that 41·3% are due to hospital-related transmission.[3] In addition to adults, COVID-19 also occurs in children.[4] Close contact with patients with COVID-19 is thought to be the main transmission route in children and adults. The first confirmed case of COVID-19 in a child with acute lymphocytic leukaemia was reported on March 8, 2020, in Wuhan, China.[5] The patient's pulmonary lesions progressed rapidly and were treated with respiratory support. Children with haematological malignancies might have increased susceptibility to infection with SARS-CoV-2 because of immunodeficiency; therefore, procedures are needed to avoid hospital-related transmission and infection for these patients. Here we propose a strategic plan for the management of COVID-19 outbreaks in paediatric haematology and oncology departments, focusing primarily on viral infection prevention and control strategies.

First, medical staff should be kept up to date with the latest information about COVID-19 and do regular assessments to look for cases of COVID-19 in their departments. Second, a COVID-19 expert committee should be established in the hospital to make medical decisions in multidisciplinary consultation meetings. Committee members should include: respiratory physicians, infectious disease physicians, haematology and oncology physicians, radiologists, pharmacists, and medical staff from hospital infection control departments. Third, to minimise cross-infection between all people within the hospital, regional management strategies should be adopted. Personnel within the hospital should not enter other medical areas without permission. Four zones within each hospital can be created to reduce the incidence of cross-infection, and to screen patients who are potentially infected with COVID-19.[6] Zone 1 (surveillance and screening zone) is for patients who are deemed to need surveillance by expert consultation because they could potentially be infected with SARS-CoV-2; each patient should be isolated in a single room. Zone 2 (suspected quarantine zone) is for suspected cases of COVID-19; each patient should be isolated in a single room. Zone 3 (COVID-19 confirmed quarantine zone) is used to treat patients with confirmed COVID-19. This area might be a challenge to set up if the hospital does not have the appropriate conditions

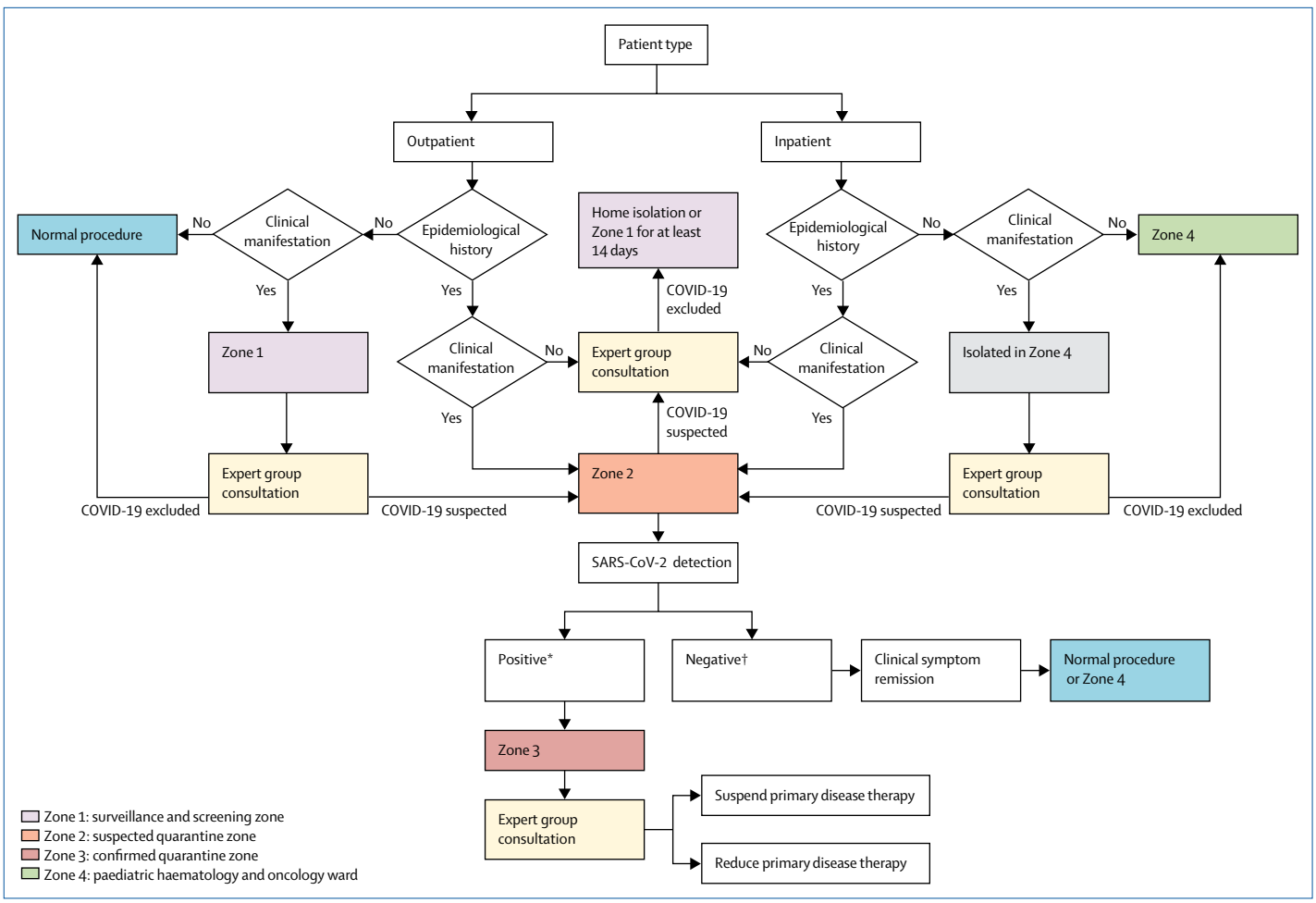

***Figure*: The COVID-19 screening process for paediatric haematology and oncology departments**

*Positive: any positive sputum, throat swab, or lower respiratory tract secretion test. †Negative: both of two tests at an interval of more than 24 h are negative.

to treat confirmed patients, in which case patients can be transferred to specialised hospitals with capacity for treatment. Zone 4 (haematological oncology ward) is used for the treatment of patients with haematological malignancies but who do not have COVID-19. All zones must provide personal protective equipment (PPE), such as protective clothing, helmets, goggles, or other garments and equipment. The workplace should provide written instructions about when to wear PPE and which type to use. Before leaving the work area, people should remove all PPE and put it in special waste containers for subsequent decontamination by the biosafety facility.

For prevention and control, outpatients to the paediatric haematology and oncology department must be booked in advance by phone or online. Pre-examination and triage staff should provide masks to the children and accompanying adults, investigate epidemiological history, and record symptoms and temperature. Patients with positive epidemiological history or fever (temperature >37·2°C), cough, and other respiratory symptoms should be directed to the specific outpatient clinic and assessed by diagnostic criteria. Specific triage will follow the suggested COVID-19 screening process (figure). Moreover, all patients except those with severe disease requiring urgent treatment and those whose chemotherapy cannot be delayed should not enter the haematology and oncology ward. Patients that do need to enter should undergo epidemiological and clinical assessment again to pass the COVID-19 screening process. After admission, inpatients must strictly abide by the relevant rules, children and caregivers are not allowed to leave the ward during hospitalisation, and body temperature is monitored and recorded daily. Each paediatric patient should be accompanied by a fixed

caregiver and other people are prohibited from visiting the wards. Of note, chemotherapy complicated by respiratory infections is common in paediatric patients with haematological malignancies; however, all patients with sudden respiratory infections should be isolated as much as possible, and the team of experts should do the COVID-19 screening process again.

Information on the prevention and control of COVID-19 can be given to patients and their families in different forms, such as notices and booklets, with instructions on how to properly wash hands, wear a mask, and cough. The hospital should provide various support for isolated children and their parents, including psychological support. Medical staff, especially those working in hospitals, need to take care of people who have been diagnosed with or are suspected of having COVID-19, as their diagnosis could affect their mental health and they might worry about transmitting the virus to family, friends, or colleagues.[7] Children and their parents or guardians should also be informed about the importance of not concealing symptoms associated with COVID-19.

For patients who have chemotherapy planned, we recommend the following. First, during induction treatment for patients with acute lymphocytic leukaemia and acute non-lymphocytic leukaemia, scheduled chemotherapy should not be interrupted unless COVID-19 is suspected or diagnosed. However, patients should avoid using public transport and visiting crowded areas when returning to the hospital. Second, as SARS-CoV-2 has an incubation period of 2–7 days,[8] we recommend a treatment delay of no more than 7 days to allow a short period of observation to screen for potentially infected children. For the consolidation phase and intermediate phase of chemotherapy, treatment should not be delayed for more than 7 days for patients with acute lymphocytic leukaemia and acute non-lymphocytic leukaemia. Third, for paediatric patients with lymphoma and other solid tumours (eg, nephroblastoma, hepatoblastoma, neuroblastoma, and germinoma), we recommend that they should be treated in haematological and oncology wards (after COVID-19 screening) according to their chemotherapy schedule, and without delay, until they are in complete remission. If the patient is in complete remission, we recommend a treatment delay of no more than 7 days to allow a short period of observation to screen for COVID-19. Finally, we recommend that patients in the remission phase having maintenance chemotherapy delay treatment for no more than 14 days. This increase in the maximum delay before chemotherapy strikes a balance between the potential risk of SARS-CoV-2 infection and tumour recurrence, since paediatric patients in this phase of treatment have a reduced risk of tumour recurrence.

The paediatric branch of the Chinese Medical Association has developed detailed principles for the diagnosis and treatment of children with COVID-19.[9] Paediatric patients with haematological diseases often have abnormal white blood cell counts and classifications of white blood cells, and we suggest that routine blood tests are not necessary to diagnose suspected cases. We recommend that children with haematological disorders be considered as potentially being infected with SARS-CoV-2 if they meet any criteria in the history of epidemiology or any criteria in the clinical manifestations other than white blood cell count and classification. For inpatients diagnosed with COVID-19, we recommend that the expert group consult according to the following principles to determine a treatment plan: first, treatment of COVID-19 should be prioritised for children with primary disease remission; second, for children who are not in remission, priority treatment should be given to those who are critical; and third, in the case of isolation, patients should be treated for COVID-19 while reducing the intensity of chemotherapy for the primary disease, or chemotherapy should be temporarily suspended according to the specific situation.

On the basis of this management, we saw no SARS-CoV-2 infection in children with haematological malignancies in our haematology and oncology departments. However, in departments in which COVID-19 cannot be controlled, the recommendations described here could fail to some extent as a result of differences in medical resources, health-care settings, and the policy of the specific government. Our recommendations should be updated continuously with accumulated clinical evidence and the increase in knowledge about COVID-19 over time.

We declare no competing interests. YH, ZL, and TW contributed equally.

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Attention should be paid to venous thromboembolism prophylaxis in the management of COVID-19

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Since December, 2019, the coronavirus disease 2019 (COVID-19) has spread globally, infecting more than 1 million people and causing more than 70 000 deaths.[1,2] Among patients with COVID-19, especially those who are severely and critically ill, a variety of potential risk factors for venous thromboembolism exist, including infection, immobilisation, respiratory failure, mechanical ventilation, and central venous catheter use.[3,4] However, to the best of our knowledge, risk of venous thromboembolism in these patients has not yet been reported. Here we use a nationwide dataset from China to provide a delineation of venous thromboembolism risk in patients with COVID-19.

On behalf of the National Clinical Research Centre for Respiratory Disease, together with the National Health Commission of the People's Republic of China, we collected data from 1099 patients with laboratory-confirmed COVID-19 in 31 provincial administrative regions throughout the country.[5] The study was supported by the National Health Commission, was designed by the investigators, and was approved by the institutional review board of the National Health Commission. Written informed consent from the patients was waived in light of the urgent need to collect data, and the fact that this was a retrospective analysis of deidentified data. Data were analysed and interpreted by the authors. Continuous variables were expressed as medians with IQR. Wilcoxon rank-sum tests were applied to continuous variables, and χ^2 tests were used for categorical variables. To estimate the odds ratio (OR) associated with venous thromboembolism risk, variables including outcomes and laboratory findings that were adjusted by age (by use of logistic regression) were further analysed by logistic regression.

Venous thromboembolism risk was evaluated on admission to hospital via the Padua Prediction Score;[6] data from 73 patients were excluded because of an absence of clinical information. Of the 1026 patients that were included, 407 (40%) were considered as high risk on the basis of a score of 4 or more—the remaining patients were defined as low risk. Bleeding risk was evaluated according to a published investigation,[7] with patients considered to be at high risk if they had two or more

	Padua Prediction Score <4 (n=619)	Padua Prediction Score ≥4 (n=407)	OR (95% CI)*	p value*
High bleeding risk†	7 (1%)	44 (11%)	8·51 (3·74–19·35)	<0·0001
Intensive care unit admission	5 (1%)	47 (12%)	12·82 (5·00–32·91)	<0·0001
Mechanical ventilation	6 (1%)	57 (14%)	13·17 (5·56–31·19)	<0·0001
Mortality	0 (0%)	14 (3%)	..	..
Age, years	42 (33–55)	52 (40–64)	..	<0·0001
≥70‡	19 (3%) of 559	56 (15%) of 384	4·85 (2·83–8·31)	<0·0001

Data are n (%) or median (IQR). *Adjusted by age. †Bleeding risk was evaluated according to a previous study.[7] ‡A threshold of 70 years was selected on the basis of the Padua Prediction Score and age data were not available for all patients.

Table: **Bleeding score, outcomes, and age of patients with COVID-19 with high and low risk of venous thromboembolism according to the Padua Prediction Score**