Table S1. Definitions of weekly COVID-19 risk assessment indicators

Category	Indicator	Definition	
Response Capacity	Availability of ICU (%)	No. of patients allocated to ICU during the corresponding week No. of ICUs secured for the corresponding week	×100
	Severe cases in hospital (case)	No. of reported confirmed cases receiving non-invasive ventilation, high flow O2, invasive ventilation, multi-organ failure, ECMO, and CRRT treatment during the corresponding week	
	incidence rate to medical capacity (%)	Daily average no. of confirmed cases per week No. of confirmed cases that could be accommodated[a)]	
	Availability of hospitals dedicated to infectious disease (%)	No. of patients assigned to hospital dedicated to infectious disease during the corresponding week No. of hospital beds dedicated to infectious disease during the corresponding week	×100
	Availability at residential treatment centers (%)	No. of patients assigned to the residential treatment center during the corresponding week No. of beds available at the residential treatment center during the corresponding week	×100
	Availability of home-treatment medical institutions (%)	No. of confirmed cases managed at the intensive care medical institutions during the corresponding week Total no. of patients that could be cared for at the intensive care medical institutions during the corresponding week	×100
	Percentage of patients receiving treatment at home (%)	No. of patients assigned to treatment at home during the corresponding week New confirmed cases per week	×100
	Daily average no. of patients receiving treatment at home per week (case)	No. of patients managed with treatment at home for the corresponding week	
	Percent managed under quarantine (%)	Confirmed cases while in quarantine New confirmed cases per week	×100
Incidence	Death (case)	No. of confirmed cases reported to be confirmed and dead during the corresponding week	
	Fatality rate (%)	No. of deaths per week New confirmed cases per week	×100
	New severe cases (case)	No. of reported confirmed cases and assigned a treatment meeting the criteria for severe case during the corresponding week	
	Severity rate (%)	No. of new severe patients per week+ no. of deaths per week New confirmed cases per week	×100
	No. of admissions (case)	No. of patients allocated to critical care and semi-critical care beds or infectious disease-dedicated hospitals during the corresponding week	
	Daily average no. of confirmed cases per week (case)[b)]	Patients diagnosed with COVID-19 during the corresponding week using PCR or RAT 7	
	Daily average no. of confirmed cases from overseas entry per week (case)	Patients diagnosed with COVID-19 during the corresponding week using PCR or RAT and classified as overseas entry	
	Daily average no. of confirmed cases per week (per 100,000 population) (case)[b)]	Patients diagnosed with COVID-19 during the corresponding week using PCR or RAT The no. of residents in the resident registration population of the Ministry of Public Administration and Security	×100
	New confirmed cases (case)[b)]	Patients diagnosed with COVID-19 during the corresponding week using PCR or RAT	
	New confirmed cases aged >60 years (case)[b)]	Patients aged ≥60 years diagnosed with COVID-19 during the corresponding week using PCR or RAT	
	Percentage of confirmed cases aged >60 years (%)	Patients aged ≥60 years diagnosed with COVID-19 during the corresponding week using PCR or RAT Patients diagnosed with COVID-19 during the corresponding week using PCR or RAT	
	Percentage of confirmed cases aged <18 years (%)	Patients aged ≤18 years diagnosed with COVID-19 during the corresponding week using PCR or RAT Patients diagnosed with COVID-19 during the corresponding week using PCR or RAT	
	New confirmed cases <18 years (case)[b)]	Patients aged ≤18 years diagnosed with COVID-19 during the corresponding week using PCR or RAT	
	Percentage of unvaccinated (including first vaccination) (%)	Patients confirmed during the corresponding week who were unvaccinated received only one vaccination or had received a second vaccination within the past 14 d Patients diagnosed with COVID-19 during the corresponding week using PCR or RAT	
	Rt	Calculating weekly mean Rt value using the Cori method	
	Percentage of positive results (%)	Patients diagnosed with COVID-19 using PCR during the corresponding week Patients who took a PCR test during the corresponding week	×100

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Table S1. Continued

Category	Indicator		Definition	
Vaccination	Percentage receiving a full vaccination (%)		Patients who had completed the initial vaccination by the corresponding week The no. of residents in the resident registration population of the Ministry of Public Administration and Security	×100
	Percentage receiving the booster (%)		Patients who had completed additional vaccinations by the corresponding week The no. of residents in the resident registration population of the Ministry of Public Administration and Security	×100
	Percentage of those aged ≥60 years receiving a full vaccination (%)		Those who had completed the initial vaccination by the corresponding week The no. of residents aged ≥60 years in the resident registration population of the Ministry of Public Administration and Security	×100
	Percentage of those aged ≥60 years receiving a booster (%)		Those who had completed additional vaccinations by the corresponding week The no. of residents aged ≥60 years in the resident registration population of the Ministry of Public Administration and Security	×100
	Fourth vaccination rate in those aged ≥60 years (%)		Those who had completed additional vaccinations by the corresponding week The no. of residents aged ≥60 years in the resident registration population of the Ministry of Public Administration and Security	×100
	Vaccination effect (%)	Infected	1-(Percentage of cases infected within 28 days in the 3rd vaccination completion group (Those who have completed initial vaccination and have received 1 additional dose at least 14 days prior) /Percentage of cases infected within 28 days in the unvaccinated group (Those who have not been vaccinated or have received the 1st vaccination within the past 14 days))	
		Severity	1-(Percentage of cases infected within 28 days among those who had received a third vaccination (those who have completed the initial vaccination and have received one additional dose at least 14 days prior)/Percentage of cases infected within 28 days in the unvaccinated group (those who have not been vaccinated or have received the first vaccination within the past 14 days))	
		Death	1-(Percentage of cases infected within 28 days in the 3rd vaccination completion group (those who have completed initial vaccination and have received 1 additional dose at least 14 days prior)/Percentage of cases infected within 28 days in the unvaccinated group (those who have not been vaccinated or have received the 1st vaccination within the past 14 days))	
Testing	Omicron variant detection rate among domestic infected cases (%)		Omicron (BA.1) detected in variant testing No. of patients who confirmed by PCR during the corresponding week	×100
	Omicron variant detection rate among infected cases from overseas entry (%)		If omicron (BA.1) was detected in the variant testing No. of patients who confirmed by PCR during the corresponding week	×100
	BA.2 detection rate among domestic infected cases (%)		Omicron (BA.2) detected in variant testing/no. of patients who received variant testing through random sample extraction among those who were infected domestically and confirmed by PCR during the corresponding week	×100

COVID-19, coronavirus disease 2019; ICU, intensive care unit; ECMO, extracorporeal membrane oxygenation; CRRT, continuous renal replacement therapy; PCR, polymerase chain reaction; RAT, rapid antigen test; Rt, time-varying reproduction number.
[a)]The no. of confirmed cases that can be accommodated was determined based on the availability of critical care beds, the proportion of cases progressing to severe disease, and the average length of hospital stay. This number was then calculated as follows for the given period. [b)]Criteria for counting changed from domestic infected cases to all infected patients (including overseas entry) from March 27.

