

## Supplemental Online Content

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**eTable 1.** Associations of BNT162b2 Vaccine Third Dose Vaccination and Other Co-Variates With SARS-CoV-2 Infection >7 Days Following Third Dose Administration

**eTable 2.** Associations of BNT162b2 Third Dose Vaccination With SARS-CoV-2 Infection, COVID-19 Hospitalizations, and Deaths >14 Days Following Vaccination Among Residents of Long-Term Care Facilities

This supplemental material has been provided by the authors to give readers additional information about their work.

**eTable 1: Associations of BNT162b2 Vaccine Third Dose Vaccination and Other Co-Variates With SARS-CoV-2 Infection >7 Days Following Third Dose Administration**

	Unadjusted HR (95% CI) <sup>a</sup>	P-value <sup>a</sup>	Adjusted HR (95% CI) <sup>c</sup>	P-value <sup>c</sup>
<b>BNT162b2 booster dose vaccination</b>				
Two doses only <sup>b</sup>	1.00	<.001	1.00	<.001
third dose vaccination > 7 days	0.10 (0.07, 0.15)		0.11 (0.07, 0.15)	
<b>Age, years</b>	1.00 (0.98, 1.01)	0.65	1.00 (0.98, 1.02)	0.99
<b>Sex</b>				
Female	1.00	0.18	1.00	0.05
Male	1.18 (0.92, 1.52)		1.29 (0.99, 1.68)	
<b>Residential socioeconomic status</b>		0.87		0.72
Low	1.00		1.00	
Intermediate	1.05 (0.69, 1.59)	0.81	1.07 (0.67, 1.71)	0.76
High	0.96 (0.60, 1.51)	0.86	0.93 (0.56, 1.55)	0.78
<b>Population group</b>		0.76		0.87
Arab population	1.00		1.00	
General Jewish population	0.97 (0.33, 2.84)	0.69	1.10 (0.38, 3.16)	0.85
Ultraorthodox Jewish population	1.21 (0.59, 2.51)	0.59	1.21 (0.57, 2.55)	0.61
<b>Calendar epidemiological week</b>	0.10 (0.04, 0.28)	<.001	0.34 (0.12, 1.00)	0.05

HR: Hazard ratio; CI: Confidence intervals

<sup>a</sup> Unadjusted Cox regression models

<sup>b</sup> The second dose was administered  $\geq 5$  months before the follow-up starting date

<sup>c</sup> Multivariable Cox regression model, adjusted for the variables in the table and epidemiological week

**eTable 2: Associations of BNT162b2 Third Dose Vaccination With SARS-CoV-2 Infection, COVID-19 Hospitalizations, and Deaths >14 Days Following Vaccination Among Residents of Long-Term Care Facilities**

	Number of residents	Number of cases	Cumulative incidence	Unadjusted HR (95% CI) <sup>b</sup>	P-value <sup>b</sup>	Adjusted HR (95% CI) <sup>c</sup>	P-value <sup>c</sup>
<b>RT-PCR confirmed SARS-CoV-2 infection</b>							
Two doses of BNT162b2 vaccine <sup>a</sup>	2440	127	5.6%	1.00	<.001	1.00	<.001
Three doses of BNT162b2 vaccine	16,020	67	0.4%	0.08 (0.05, 0.13)		0.09 (0.05, 0.14)	
<b>Mild/moderate COVID-19 hospitalization</b>							
Two doses of BNT162b2 vaccine <sup>a</sup>	2431	68	2.9%	1.00	<.001	1.00	<.001
Three doses of BNT162b2 vaccine	16,019	19	0.1%	0.06 (0.03, 0.12)		0.05 (0.02, 0.11)	
<b>Severe COVID-19 hospitalization</b>							
Two doses of BNT162b2 vaccine <sup>a</sup>	2440	44	1.9%	1.00	<.001	1.00	<.001
Three doses of BNT162b2 vaccine	16,020	9	0.1%	0.06 (0.02, 0.16)		0.06 (0.02, 0.17)	
<b>COVID-19 related deaths<sup>d</sup></b>							
Two doses of BNT162b2 vaccine <sup>a</sup>	2440	14	0.6%	1.00	<.001	1.00	<.001 <sup>d</sup>
Three doses of BNT162b2 vaccine	16,020	4	0.02%	0.04 (0.007, 0.19)		0.03 (0.006, 0.20) <sup>d</sup>	

<sup>a</sup> The second dose was administered  $\geq 5$  months before the follow-up start date

<sup>b</sup> Unadjusted Cox regression models

<sup>c</sup> Multivariable Cox regression model, adjusted for the variables age, sex, community-level socioeconomic status rank, population group, and epidemiological week

<sup>d</sup> Multivariable Cox regression model, adjusted for the variables age, sex, and epidemiological week

HR: hazard ratio; CI: confidence intervals