

Table S1: Outcome and results of association between body mass index groups and mortality in aged adults (detailed information)

Author, year	Outcome	Medical condition	Analysis	Results			Obesity paradox
				BMI Classes (kg/m <sup>2</sup> )	Estimates (95% CI)	p	
Kananen, 2022 [68]	In-hospital mortality	Covid-19	Adjusted OR	<18.5	2.30 (1.17–4.31)	.01	No
				18.5–24.9	Reference		
				25.0–29.9	1.05 (0.63–1.70)	.86	
				≥ 30.0	1.23 (0.57–2.45)	.58	
Amin, 2021 [11]	30-day mortality	Hip fracture	Adjusted HR	<18.5	1.54 (1.06–2.24)	<.0001	Yes
				18.5–24.9	Reference		
				25.0–29.9	0.69 (0.62–0.77)	<.0001	
				30.0–34.9	0.62 (0.51–0.74)	<.0001	
				35.0–39.9	0.69 (0.50–0.95)	.02	
				40.0–49.9	0.65 (0.38–1.13)	.13	
				≥ 50.0	1.15 (0.51–2.60)	.73	
Danninger, 2021 [52]	ICU mortality	Sepsis	Adjusted OR	<18.5	1.57 (1.16–2.12)	.003	Yes
				18.5–24.9	Reference		
				25.0–29.9	0.88 (0.73–1.06)	.18	
				≥ 30.0	0.82 (0.68–0.98)	.03	
El Moheb, 2021 [12]	30-day mortality	Emergent surgery	Adjusted HR	18.5–24.9	Reference		Yes
				25.0–29.9	0.80 (0.75–0.84)	<.05	
				30.0–34.9	0.80 (0.74–0.85)	<.05	

Lin, 2021 [13]	84-month mortality	None specific	Adjusted HR	35.0–39.9	0.70 (0.63–0.77)	<.05	Yes	
				≥ 40.0	0.82 (0.74–0.91)	<.05		
				<18.5	1.95 (1.79–2.12)	<.01		
				18.5–23.9	Ref.			
				24.0–26.9	0.75 (0.71–0.80)	<.01		
				≥ 27.0	0.74 (0.69–0.79)	<.01		
Martinez-Tapia,2021 [14]	12-month mortality	Cancer	Unadjusted HR (Men)	<22.5	1.64 (1.31-2.07)	<.0001	Yes	
				22.5–24.9	Reference			
				25.0–29.9	0.88 (0.69-1.11)			
			≥ 30.0	0.70 (0.50-0.98)				
			Unadjusted HR (Women)	<22.5	1.65 (1.25-2.18)			
				22.5–24.9	Reference			
	25.0–29.9			1.03 (0.76-1.40)				
	60-month mortality		≥ 30.0	0.72 (0.49-1.06)		<.0001	Yes	
			Unadjusted HR (Men)	<22.5	1.51 (1.25-1.81)			
				22.5–24.9	Reference			
				25.0–29.9	0.84 (0.70-1.01)			
			Unadjusted HR (Women)	≥ 30.0	0.74 (0.58-0.95)			
<22.5		1.31 (0.07-1.61)						
22.5–24.9	Reference							
				25.0–29.9	0.95 (0.77-1.18)			
				≥ 30.0	0.60 (0.46-0.79)			
Lai, 2020 [15]	72-month	None specific	Adjusted HR	<18.5	1.80 (1.11-2.94)	.02	No	

	mortality			18.5–23.9	Reference		
				24.0–26.9	1.23 (0.68–2.21)	.50	
				≥ 27.0	0.39 (0.14–1.07)	.07	
Schneider, 2020 [16]	12-month mortality	Glioblastoma	Adjusted OR	<30.0	3.10 (1.10–9.20)	.04	Yes
				≥ 30.0	Reference		
				10 <sup>th</sup> percentile (19.8)	1.30 (0.92–1.83)	NS	
			Adjusted HR (Men)	50 <sup>th</sup> percentile (23.3)	Reference		No
				90 <sup>th</sup> percentile (27.2)	0.65 (0.41–1.03)	NS	
Seino, 2020 [53]	All-cause mortality	None specific		10 <sup>th</sup> percentile (18.9)	1.87 (1.18–2.95)	S	
			Adjusted HR (Women)	50 <sup>th</sup> percentile (22.8)	Reference		No
				90 <sup>th</sup> percentile (27.3)	0.88 (0.54–1.42)	NS	
				<18.5	1.55 (0.41–5.85)	.52	
Nishida, 2019 [17]	36-month mortality	None specific	Adjusted HR	18.5–23.0	Reference		No
				23.0–27.5	1.00 (0.42–2.39)	1.00	
				≥ 27.5	0.96 (0.12–7.67)	.97	
Om, 2019 [18]	12-month mortality	Aortic stenosis	Unadjusted rates	≤22.3	19%	.006	Yes
				22.4–24.8	10%		

				≥ 24.9	6%			
Tokarek, 2019 [54]	12-month survival	TAVI patients	Unadjusted HR	18.5–24.9	Reference	.008	Yes	
				25.0–29.9	2.26 (0.91–5.60)			
				≥ 30.0	3.86 (1.43–10.46)			
Yoshihisa, 2019 [19]	In-hospital mortality	AHF	Unadjusted OR	≥ 25.0	Reference	<.001	Yes	
				< 25.0	3.49 (2.05–5.97)			
Crotti, 2018 [20]	68-month mortality	None specific	Adjusted HR	18.5–24.9	Reference	<.05	Yes	
				25.0–29.9	0.76 (0.63–0.92)			
				30.0–39.9	0.85 (0.69–1.04)			NS
				≥ 40.0	1.53 (0.92–2.52)			NS
	68-month CVD mortality			18.5–24.9	Reference	NS	No	
				25.0–29.9	0.81 (0.61–1.08)			
				30.0–39.9	0.92 (0.67–1.26)			NS
				≥ 40.0	1.14 (0.45–2.88)			NS
	68-month cancer mortality			18.5–24.9	Reference	NS	No	
				25.0–29.9	0.99 (0.70–1.39)			
				30.0–39.9	1.07 (0.74–1.54)			NS
				≥ 40.0	2.91 (1.43–5.94)			<.05
De Palma, 2018 [21]	12-month mortality	TAVI patients	Unadjusted HR	≥ 25.0	0.63 (0.45–0.86)	.005	Yes	
				< 25.0	Reference			
	50-month mortality		Unadjusted HR	≥ 25.0	0.68 (0.50–0.93)	.02	Yes	
				< 25.0	Reference			
Keller, 2018 [55]		AMI	Unadjusted	<30	Reference		Yes	

Kim, 2018 [22]	In-hospital mortality		OR <sup>#</sup>	30–34.9	0.41 (0.36–0.48)	<.0001	Yes
				35–39.9	0.59 (0.47–0.74)	<.0001	
				≥ 40	0.73 (0.54–0.98)	.04	
	60-month mortality	None specific	Adjusted HR (men)	16.0–17.4	2.87 (2.60-3.18)	<.0001	
				17.5–19.9	1.84 (1.74-1.95)	<.0001	
				20.0–22.4	1.25 (1.119-1.31)	<.0001	
				22.5–24.9	Reference		
				25.0–27.4	0.86 (0.81-0.91)	<.0001	
				27.5–29.9	0.79 (0.71-0.87)	<.0001	
				≥ 30.0	0.93 (0.78-1.12)	.45	
			Adjusted HR (women)	16.0–17.4	2.94 (2.57-3.37)	<.0001	
				17.5–19.9	1.94 (1.79-2.09)	<.0001	
				20.0–22.4	1.29 (1.21-1.38)	<.0001	
				22.5–24.9	Reference		
				25.0–27.4	0.84 (0.78-0.91)	<.0001	
				27.5–29.9	0.89 (0.81-0.97)	.01	
				≥ 30.0	0.92 (0.80-1.05)	.21	
Lee, 2018 [56]	60-month mortality	None specific	Adjusted HR	<18.5	2.58 (2.24-2.97)	<.05	No
				18.5–22.9	1.41 (1.29-1.55)	<.05	
				23.0–24.9	Reference		
				25.0–27.4	1.02 (0.91-1.14)	NS	
				27.5–29.9	0.92 (0.77-1.09)	NS	
				≥ 30.0	1.12 (0.85-1.47)	NS	

Lv, 2018 [23]	36-month mortality	None specific	Adjusted HR	<18.5	Reference		Yes
				18.5–22.0	0.71 (0.60–0.83)	<0.01	
				≥ 24.0	0.60 (0.47–0.76)	<0.01	
de Souto Barreto, 2017 [24]	18-month mortality	Dementia	Adjusted HR (With dementia)	<18.5	1.61 (1.25–2.09)	<.0001	Yes
				18.5–24.9	Reference		
				25.0–29.9	0.60 (0.49–0.75)	<.0001	
				≥ 30.0	0.54 (0.38–0.76)	<.0001	
			Adjusted HR (Without dementia)	<18.5	1.19 (0.87–1.64)	.28	No
				18.5–24.9	Reference		
				25.0–29.9	0.81 (0.65–1.00)	.05	
Wu, 2017 [25]	12-month mortality	Atrial fibrillation	Adjusted HR (65–74 years)	<18.5	1.56 (0.69–3.51)	NS	No
				18.5–23.9	Reference		
				24.0–27.9	0.29 (0.13–0.62)	<.05	
				≥ 28.0	0.61 (0.23–1.60)	NS	
			Adjusted HR (≥ 75 years)	<18.5	0.95 (0.59–1.52)	NS	Yes
				18.5–23.9	Reference		
				24.0–27.9	0.69 (0.47–0.99)	<.05	
Cheng, 2016 [57]	132-month mortality	None specific	Adjusted HR	≥ 28.0	0.46 (0.22–0.95)	<.05	Yes
				<18.5	3.35 (1.88–5.96)	<.05	
				18.5–24.9	Reference		
				25.0–29.9	0.80 (0.70–0.90)	<.05	
				30.0–34.9	.078 (0.69–0.89)	<.05	

				35.0–39.9	0.96 (0.81–1.12)	NS	
				≥ 40.0	1.17 (0.93–1.47)	NS	
				<18.5	-		
				18.5–24.9	Reference		
		Diabetes		25.0–29.9	0.75 (0.61–0.93)	<.05	Yes
				30.0–34.9	0.78 (0.63–0.96)	<.05	
				35.0–39.9.9	0.90 (0.70–1.15)	NS	
				≥ 40.0	1.09 (0.79–1.49)	NS	
				<18.5	2.75 (1.36–5.56)	<.05	
				18.5–24.9	Reference		
		Hypertension		25.0–29.9	0.82 (0.72–0.93)	<.05	Yes
				30.0–34.9	0.80 (0.70–0.92)	<.05	
				35.0–39.9.9	0.98 (0.83–1.17)	NS	
				≥ 40.0	1.13 (0.89–1.44)	NS	
				<18.5	2.74 (1.36–5.53)	<.05	
				18.5–24.9	Reference		
		Dyslipidaemia		25.0–29.9	0.81 (0.72–0.91)	<.05	
				30.0–34.9	0.81 (0.71–0.92)	<.05	
				35.0–39.9.9	1.02 (0.86–1.20)	NS	
				≥ 40.0	1.21 (0.96–1.53)	NS	
				<22.0	Reference		
Flodin, 2016 [26]	12-month survival	Hip fracture	Adjusted OR	22.0–26.0	0.90 (0.60–1.40)	.60	Yes
				> 26.0	2.60 (1.20–5.50)	.01	

Calabia, 2015 [58]	120-month mortality	Haemodialysis	Adjusted HR	<18.0	2.23 (1.87–2.66)	<.001	Yes
				18.0–19.9	1.76 (1.51–2.05)	<.001	
				20.0–21.4	1.47 (1.26–1.71)	<.001	
				21.5–22.9	1.32 (1.14–1.52)	<.001	
				23.0–24.9	Reference		
				25.0–27.4	1.03 (0.89–1.18)	NS	
				27.5–29.9	0.93 (0.79–1.10)	NS	
				30.0–34.9	0.76 (0.62–0.93)	<.001	
				≥ 35.0	0.77 (0.54–1.10)	NS	
Kim, 2015 [59]	108-month mortality	Chronic diseases	Adjusted HR	<18.5	2.07 (1.56–2.75)	<.05	No
				18.5–19.9	1.56 (1.20–2.02)	<.05	
				20.0–21.4	1.22 (0.96–1.55)	NS	
				21.5–22.9	1.21 (0.97–1.52)	NS	
				23.0–24.9	Reference		
				25.0–26.4	0.90 (0.69–1.18)	NS	
				26.5–27.9	1.06 (0.76–1.47)	NS	
				28.0–29.9	0.84 (0.56–1.27)	NS	
				30.0–32.4	0.81 (0.42–1.56)	NS	
Kubota, 2015 [60]	132-month ID mortality	Diabetes mellitus	Adjusted HR	<20.0	1.25 (0.71–2.20)	NS	Yes
				20.0–22.9	Reference		
				23.0–24.9	0.55 (0.30–1.03)	NS	
				≥ 25.0	0.54 (0.30–0.98)	<.05	



Kuo, 2015 [27]	66-month mortality	Diabetes mellitus	Unadjusted HR*	17.5–19.9	1.80	<.001	No
				20.0–22.4	1.20	NS	
				22.5–24.9	Reference		
				25.0–27.4	0.95	NS	
				27.5–29.9	0.79	NS	
				30.0–32.5	1.62	<.001	
				32.5–35.0	2.58	<.001	
Shil Hong, 2015 [61]	72-month mortality	None specific	Adjusted HR	15.3–21.7	Reference		Yes
				21.8–23.7	0.76 (0.53–1.10)	.004	
				23.8–25.4	0.63 (0.41–0.96)		
				25.5–33.7	0.54 (0.34–0.86)		
Buys, 2014 [28]	102-month mortality	None specific	Adjusted HR	<18.5	1.57 (0.88–2.82)	NS	No
				18.5–24.9	Reference		
				25.0–29.9	0.94 (0.73–1.21)	NS	
				30.0–34.9	0.80 (0.58–1.09)	NS	
				≥ 35.0	0.73 (0.49–1.09)	NS	
Clark, 2014 [62]	120-month mortality	None specific	Adjusted HR (Africans)	<18.5	1.34 (1.11–1.63)	<.05	No
				18.5–24.9	Reference		
				25.0–29.9	0.81 (0.61–1.07)	NS	
			Adjusted HR (African)	≥ 30.0	0.82 (0.54–1.24)	NS	No
				<18.5	2.59 (1.44–4.65)	<.05	
				18.5–24.9	Reference		
				25.0–29.9	0.91 (0.72–1.15)	NS	

			Americans)	≥ 30.0	1.04 (0.83–1.31)	NS	
				<18.5	1.47 (0.84-547)	.18	
				18.5–24.9	Reference		
Ford, 2014 [29]	40-month mortality	None specific	Adjusted HR	25.0–29.9	0.78 (0.60-1.00)	.05	No
				30.0–34.9	0.80 (0.59-1.10)	.17	
				≥ 35.0	0.75 (0.48-1.17)	.20	
				<18.0	1.80 (1.00–3.00)	.04	
	6-week mortality		Adjusted HR	18.0–24.9	Reference		Yes
				25.0–29.9	0.90 (0.70–1.40)	.77	
				≥ 30.0	0.50 (0.30–0.90)	.02	
				<18.0	2.00 (1.50–2.70)	<.001	
Lang, 2014 [30]	12-month mortality	None specific	Adjusted HR	18.0–24.9	Reference		Yes
				25.0–29.9	0.80 (0.70–1.00)	.04	
				≥ 30.0	0.70 (0.50–0.90)	.002	
				<18.0	1.80 (1.30–2.30)	<.001	
	24-month mortality		Adjusted HR	18.0–24.9	Reference		Yes
				25.0–29.9	0.80 (0.70–1.00)	.04	
				≥ 30.0	0.70 (0.60–0.90)	.002	
				<18.5	2.04 (1.55-2.70)	<.0001	
				18.5–24.9	Reference		
Lee, 2014 [31]	36-month mortality	None specific	Adjusted HR	25.0–29.9	0.74 (0.57-0.96)	<.05	Yes
				≥ 30.0	1.01 (0.57-1.79)	NS	
Murphy, 2014 [63]	84-month	Diabetes	Adjusted	18.5–24.9	1.72 (1.12–2.64)	<.05	No

	mortality	mellitus	HR	25.0–29.9	Reference		
				≥ 30.0	0.89 (0.58–1.38)	NS	
Wu, 2014 [32]	60-month mortality	None specific	Adjusted HR	15.0–18.4	1.92 (1.71-2.15)	<.05	Yes
				18.5–24.9	Reference		
				25–29.9	0.82 (0.76-0.88)	<.05	
				30–34.9	0.82 (0.69-0.98)	<.05	
				≥ 35	1.59 (1.06-2.38)	<.05	
	60-month CVD mortality	None specific	Adjusted HR	15.0–18.4	1.74 (1.36-2.23)	<.05	Yes
				18.5–24.9	Reference		
				25–29.9	0.85 (0.73-0.99)	<.05	
				30–34.9	0.75 (0.51-1.09)	NS	
				≥ 35	2.36 (1.17-4.76)	<.05	
Yamauchi, 2014 [64]	In-hospital mortality	COPD	Adjusted OR	<18.5	1.55 (1.48–1.38)	<.0001	Yes
				18.5–22.9	Reference		
				23.0–24.9	0.76 (0.70–0.82)	<.0001	
				25.0–29.9	0.73 (0.66–0.80)	<.0001	
				≥ 30.0	0.67 (0.52–0.86)	.002	
Chen, 2013 [33]	18-month mortality	None specific	Adjusted HR	<18.5	Reference		Yes
				18.5–22.9	1.93 (1.16-3.20)	<.05	
				23.0–24.9	0.56 (0.36-0.87)	<.05	
Dahl, 2013 [34]	216-month mortality	None specific	Adjusted HR	< 25.0	Reference		Yes
				25.0–29.9	0.80 (0.67-0.95)	<.05	
				≥ 30.0	0.93 (0.71-1.22)	NS	

Nakazawa, 2013 [35]	12-month mortality	None specific	Adjusted HR	<17.3	2.40 (1.90-3.10)	<.05	Yes
				17.3–19.2	1.70 (1.30-2.30)	<.05	
				19.3–21.1	1.50 (1.20-2.00)	<.05	
				21.2–23.5	1.20 (0.90-1.60)	NS	
				≥ 23.6	Reference		
Takata, 2013 [36]	144-month mortality		Adjusted HR	< 19.5	1.34 (0.93-1.94)	NS	Yes
				19.5–21.1	1.05 (0.72-1.52)	NS	
				21.1–22.5	Reference		
				22.5–23.8	0.63 (0.42-0.94)	<.05	
				23.8–26.0	0.73 (0.50-1.06)	NS	
				≥ 26.0	0.82 (0.56-1.21)	NS	
	144-month CVD mortality	None specific	Adjusted HR	< 19.5	1.40 (0.67-2.90)	NS	No
				19.5–21.1	1.01 (0.51-2.22)	NS	
				21.1–22.5	Reference		
				22.5–23.8	0.64 (0.29-1.41)	NS	
				23.8–26.0	0.85 (0.42-1.75)	NS	
				≥ 26.0	1.27 (0.64-2.53)	NS	
	144-month cancer mortality		Adjusted HR	< 19.5	1.46 (0.54-3.93)	NS	No
				19.5–21.1	1.90 (0.76-4.75)	NS	
				21.1–22.5	Reference		
				22.5–23.8	0.91 (0.32-2.63)	NS	
				23.8–26.0	1.59 (0.64-3.94)	NS	
				≥ 26.0	0.87 (0.30-2.51)	NS	

Tseng, 2013 [37]	144-month mortality	Diabetes mellitus	Unadjusted rate ratio <sup>#</sup>	<18.5	1.48 (1.39–1.58)	<.0001	Yes
				18.5–22.9	Reference		
				23.0–24.9	0.71 (0.69–0.74)	<.0001	
				25.0–29.9	0.66 (0.63–0.68)	<.0001	
				≥ 30.0	0.68 (0.63–0.73)	<.0001	
Veronese, 2013 [38]	60-month mortality	None specific	Adjusted HR	< 20	1.44 (0.95-3.60)	.25	Yes
				20–24.9	Reference		
				25.0–29.9	0.90 (0.61-1.71)	.70	
				≥ 30.0	0.43 (0.20-0.70)	.01	
Woo, 2013 [39]	84-month mortality	None specific	Adjusted HR	<21.6	1.37 (1.00–1.88)	.04	No
				21.6–23.5	Reference		
				23.5–25.7	1.29 (0.95–1.73)	.10	
				≥25.7	1.53 (1.02–2.29)	.04	
Yamamoto, 2013 [40]	30-day mortality	TAVI patients	Adjusted HR	<18.5	1.54 (0.87–2.74)	.14	No
				18.5–24.9	Reference		
				25.0–29.9	0.77 (0.58–1.03)	.08	
	12-month mortality		Adjusted HR	≥ 30.0	0.71 (0.49–1.03)	.07	Yes
				<18.5	1.25 (0.78–2.00)	.35	
				18.5–24.9	Reference		
				25.0–29.9	0.81 (0.66–1.00)	.05	
Zekry, 2013 [41]	48-month mortality	None specific	Adjusted HR	≥ 30.0	0.74 (0.57–0.97)	.03	Yes
				< 20	1.07 (0.73-1.53)	.75	
				20.0–24.9	Reference		

de Hollander, 2012 [42]	120-month mortality	None specific	Adjusted HR	25.0–29.9	0.78 (0.55-1.10)	.16	No
				≥ 30.0	0.52 (0.31-0.88)	.02	
				< 20	1.06 (0.73-1.55)	NS	
				20.0–24.9	Reference		
				25.0–29.9	0.92 (0.78-1.09)	NS	
				≥ 30.0	1.05 (0.89-1.29)	NS	
				< 18.5	2.32 (1.75-3.07)	<.05	
				18.5–19.9	1.28 (1.03-1.60)	<.05	
				20.0–22.4	1.23 (1.09-1.38)	<.05	
				22.5–24.9	1.12 (1.02-1.22)	<.05	
Kvamme, 2012 [43]	12-month mortality	None specific	Adjusted HR (men)	25.0–27.4	Reference		No
				27.5–29.9	1.05 (0.95-1.15)	NS	
				30.0–32.4	1.19 (1.05-1.34)	<.05	
				32.5–34.9	1.31 (1.09-1.56)	<.05	
				≥ 35	1.53 (1.21-1.95)	<.05	
				< 18.5	1.49 (1.06-2.10)	<.05	
				18.5–19.9	1.03 (0.78-1.36)	NS	
				20.0–22.4	1.11 (0.97-0.88)	NS	
			Adjusted HR (women)	22.5–24.9	0.97 (0.88-1.06)	NS	No
				25.0–27.4	Reference		
				27.5–29.9	1.04 (0.94-1.14)	NS	
				30.0–32.4	1.16 (1.03-1.31)	<.05	
				32.5–34.9	1.43 (1.20-1.72)	<.05	
				< 18.5	1.49 (1.06-2.10)	<.05	
				18.5–19.9	1.03 (0.78-1.36)	NS	
				20.0–22.4	1.11 (0.97-0.88)	NS	

12-month RD mortality	Adjusted HR (men)	≥ 35	1.53 (1.24-1.90)	<.05	No
		< 20.0	4.35 (2.87-6.60)	<.05	
		20.0–22.4	2.45 (1.76-3.40)	<.05	
		22.5–24.9	1.58 (1.19-2.10)	<.05	
		25.0–27.4	Reference		
		27.5–29.9	0.81 (0.57-1.16)	NS	
		≥ 30	1.18 (0.81-1.71)	NS	
	Adjusted HR (women)	< 20.0	3.30 (2.07-5.27)	<.05	No
		20.0–22.4	1.83 (1.21-2.75)	<.05	
		22.5–24.9	1.32 (0.91-1.91)	NS	
		25.0–27.4	Reference		
		27.5–29.9	0.84 (0.54-1.28)	NS	
		≥ 30	1.06 (0.73-1.55)	NS	
		Adjusted HR (men)	< 20.0	1.14 (0.84-1.54)	
20.0–22.4	0.98 (0.82-1.19)		NS		
22.5–24.9	1.07 (0.94-1.22)		NS		
25.0–27.4	Reference				
27.5–29.9	1.12 (0.98-1.28)		NS		
≥ 30	1.33 (1.14-1.54)		<.05		
Adjusted HR (women)	< 20.0		1.28 (0.98-1.67)	NS	No
	20.0–22.4	1.21 (1.01-1.44)	<.05		
	22.5–24.9	1.01 (0.98-1.32)	NS		
	25.0–27.4	Reference			





			Adjusted HR (Women)	<21.0 21.0–27.0 > 27.0	1.76 (1.00-3.13) Reference 0.62 (0.26-1.49)	<.05  NS	No
	48-month mortality (≥ 75 years)		Adjusted HR (Men)	<21.0 21.0–27.0 > 27.0	1.54 (1.15–2.06) Reference 0.57 (0.29–1.12)	<.01  NS	No
			Adjusted HR (Women)	<21.0 21.0–27.0 > 27.0	2.05 (1.44–2.91) Reference 0.83 (0.46–1.52)	<.001  NS	No
Cereda, 2011 [45]	73-month mortality	None specific	Adjusted HR	< 21.0 21.0–24.9 ≥ 25.0	1.53 (1.13-2.06) 1.04 (0.77-1.40) Reference	.006 .79	Yes
Berraho, 2010 [46]	156-month mortality	None specific	Adjusted HR	< 18.5 18.5–21.9 22.0–24.9 25.0-29.9 ≥ 30	1.45 (1.17-1.78) 1.27 (1.12-1.43) Reference 0.98 (0.88-1.10) 1.06 (0.89-1.27)	<.05 <.05  NS NS	No
Han, 2010 [47]	42-month mortality	None specific	Adjusted HR	< 22.0 22.0–26.1 ≥ 26.1	Reference 0.93 (0.50-1.72) 0.54 (0.22-1.36)	.81 .19	No
Kitamura, 2010 [48]	24-month mortality	None specific	Adjusted OR	<17.1 ≥ 17.1	3.96 (1.79-8.79) Reference	.0007	Yes
Lea, 2009 [66]	125-month	AMI	Adjusted	<18.5	1.45 (1.40–1.51)	<.0001	Yes

		mortality		HR	18.5–24.9	Reference	
					25.0–29.9	0.85 (0.83–0.87)	<.0001
					30.0–34.9	0.85 (0.83–0.87)	<.0001
					35.0–39.9	0.89 (0.84–0.93)	<.0001
					≥ 40.0	0.95 (0.88–1.01)	.11
Luchsinger, 2008 [49]	144-month mortality	None specific	Adjusted HR	<23.0	1.60 (1.20-2.00)	<.05	No
				23.0–26.1	Reference		
				26.2–29.4	1.10 (0.80-1.40)	NS	
				≥ 29.4	1.10 (0.80-1.40)	NS	
Locher, 2007 [50]	36-month mortality	None specific	Adjusted HR	< 18.5	2.18 (1.02-4.66)	.45	No
				18.5–24.9	Reference		
				25.0–29.9	1.25 (0.83-1.87)	.28	
				30.0-34.9	0.83 (0.49-1.42)	.50	
				≥ 35	0.92 (0.47-1.80)	.81	
Takata, 2007 [51]	48-month mortality	None specific	Adjusted HR	< 18.5	1.94 (1.00-3.76)		Yes
				18.5–24.9	Reference	<.05	
				≥ 25.0	0.48 (0.24-0.96)		
	48-month CVD mortality			< 18.5	4.64 (1.68-12.80)		Yes
				18.5–24.9	Reference	<.05	
				≥ 25.0	1.02 (0.35-2.95)		
	48-month cancer mortality			< 18.5	2.17 (0.60-7.85)		No
				18.5–24.9	Reference	NS	
				≥ 25.0	0.26 (0.06-1.20)		

Grabowski, 2001 [67]	96-month mortality	None specific	Adjusted HR	< 19.4	1.58 (1.41-1.78)	<.0001	Yes
				19.5–28.4	Reference		
				≥ 28.5	0.83 (0.74-0.94)	.002	

HR/OR: Hazard ratio / Odds ratio; ID: Infectious diseases

\* 95% CI were not computed

# The estimates and their respective confidence intervals were not presented in the original articles, but were calculated with the information available in these articles.

TAVI: Transcatheter Aortic Valve Implementation; AHF: Acute heart failure; COPD: Chronic Obstructive Pulmonary Disease; AMI: Acute Myocardial Infarction; RD: Respiratory disease; CVD: cardiovascular disease.