Supplemental Online Content

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

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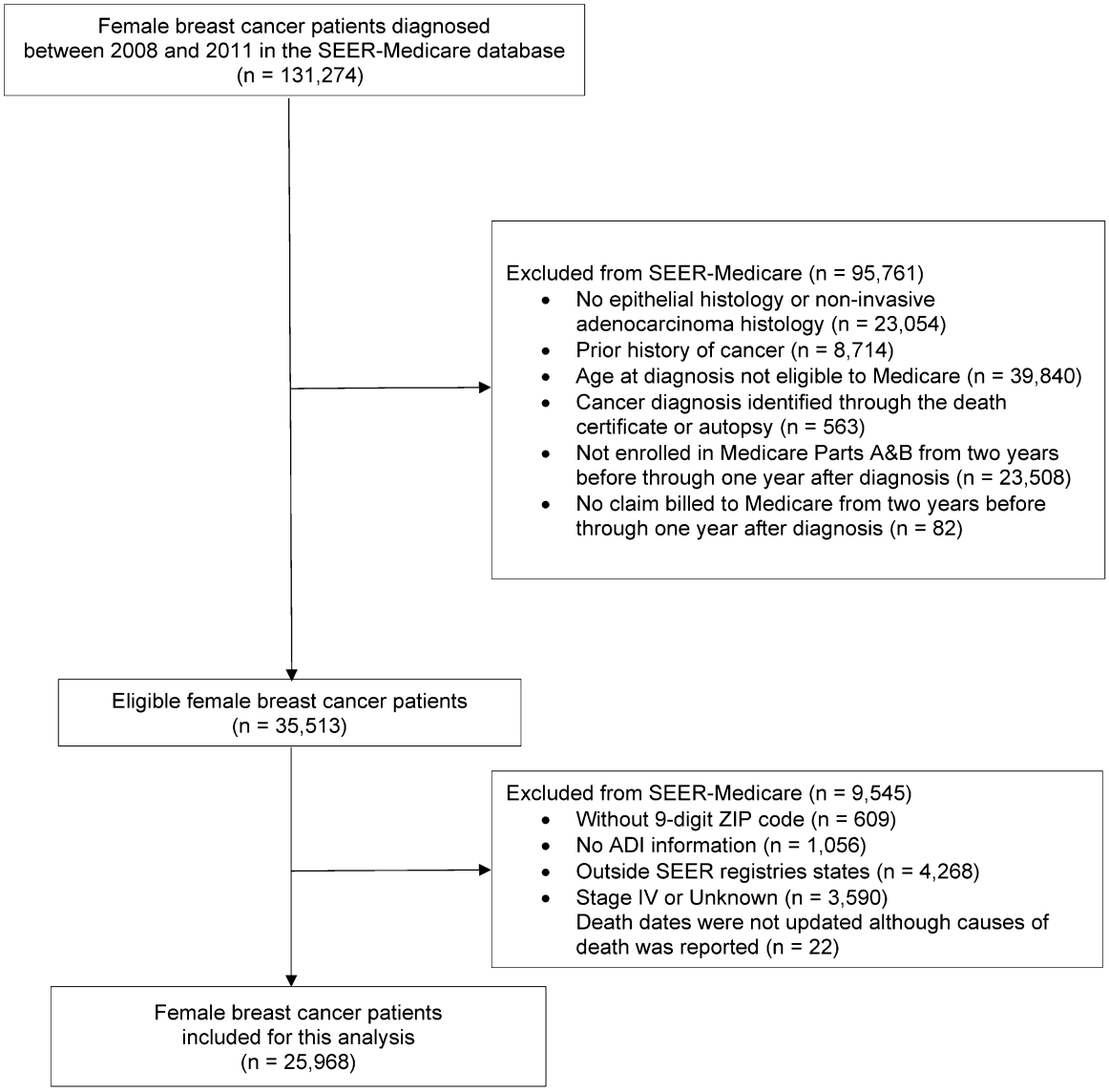
A



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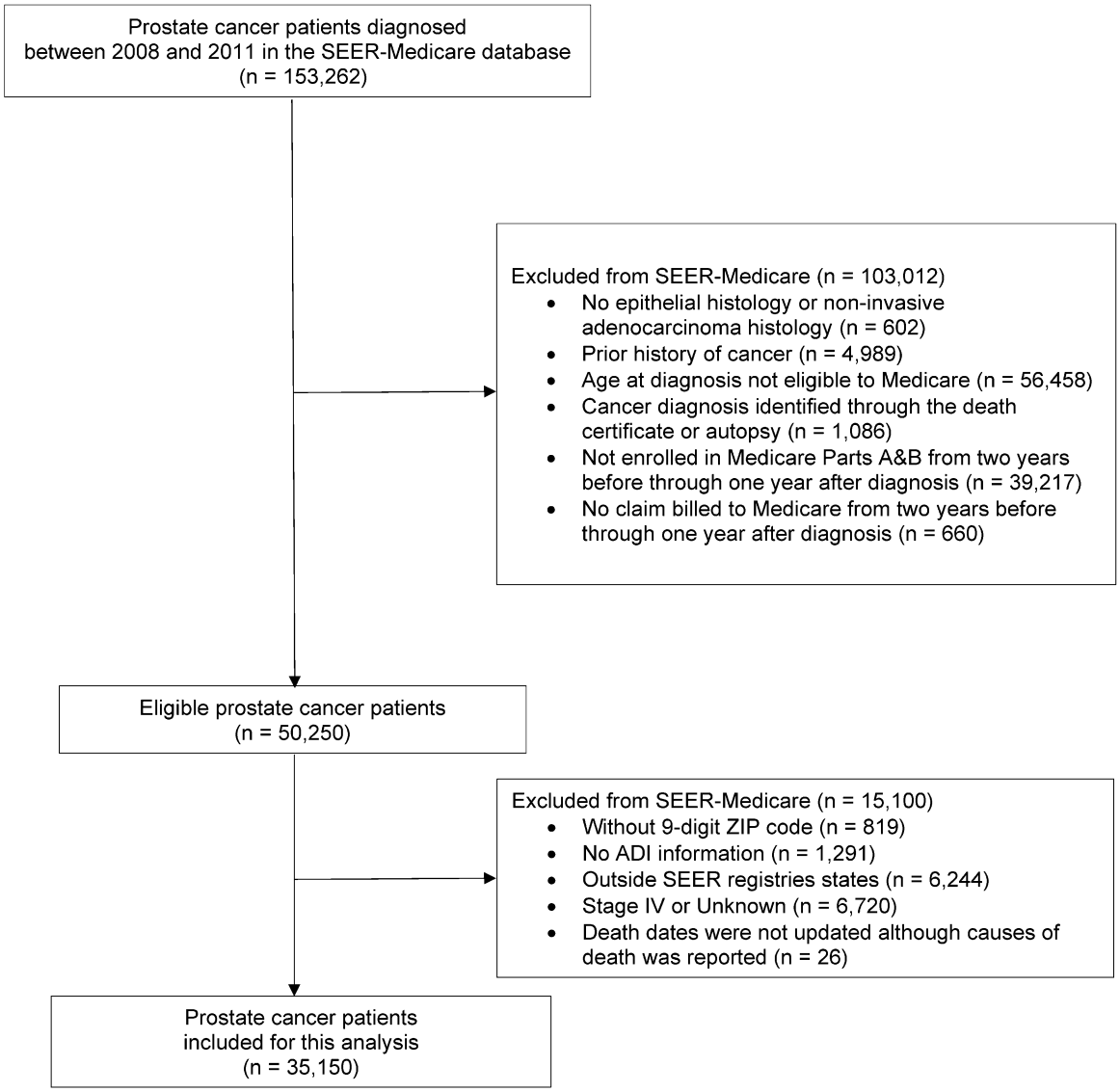
B



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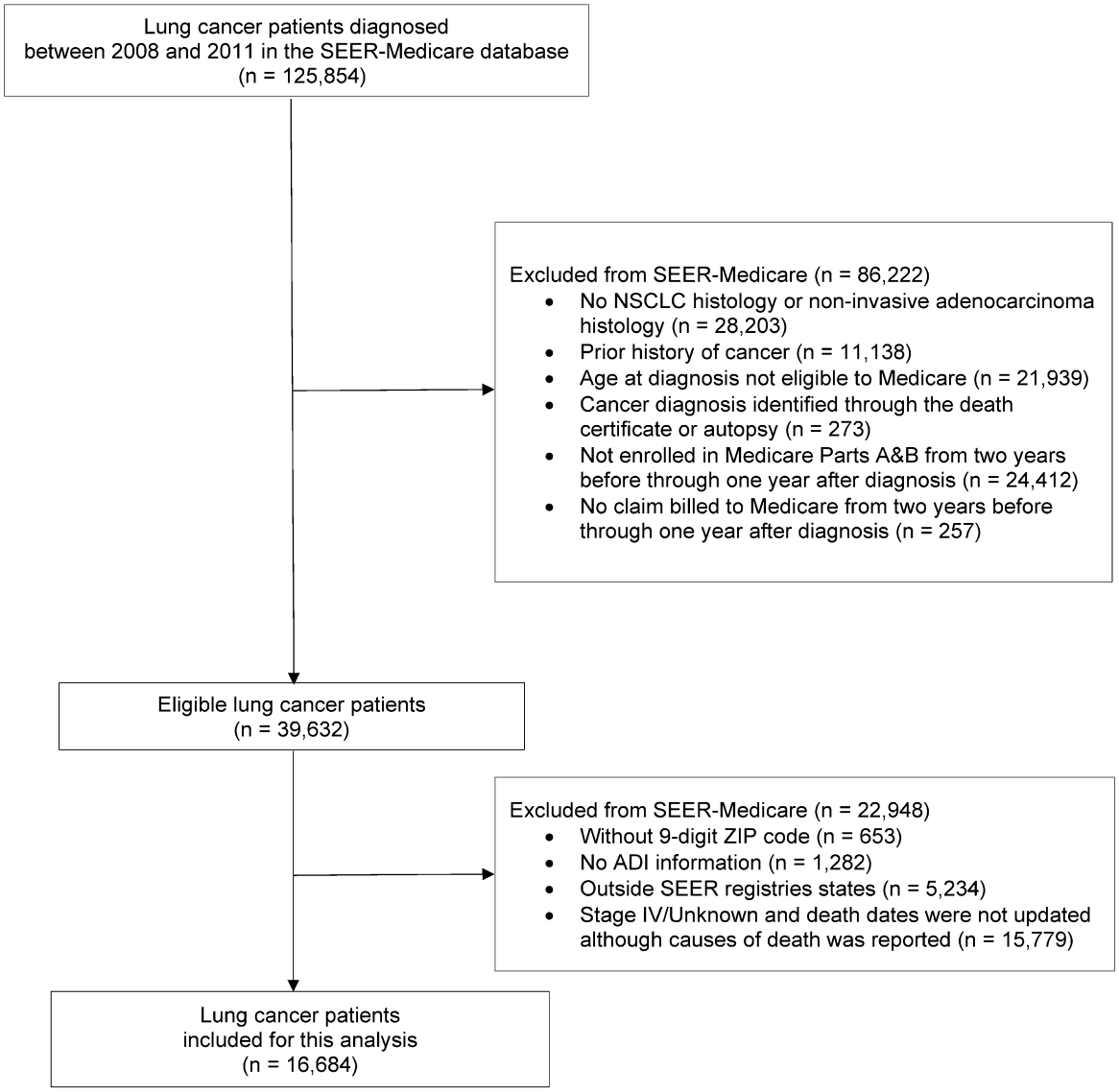
C



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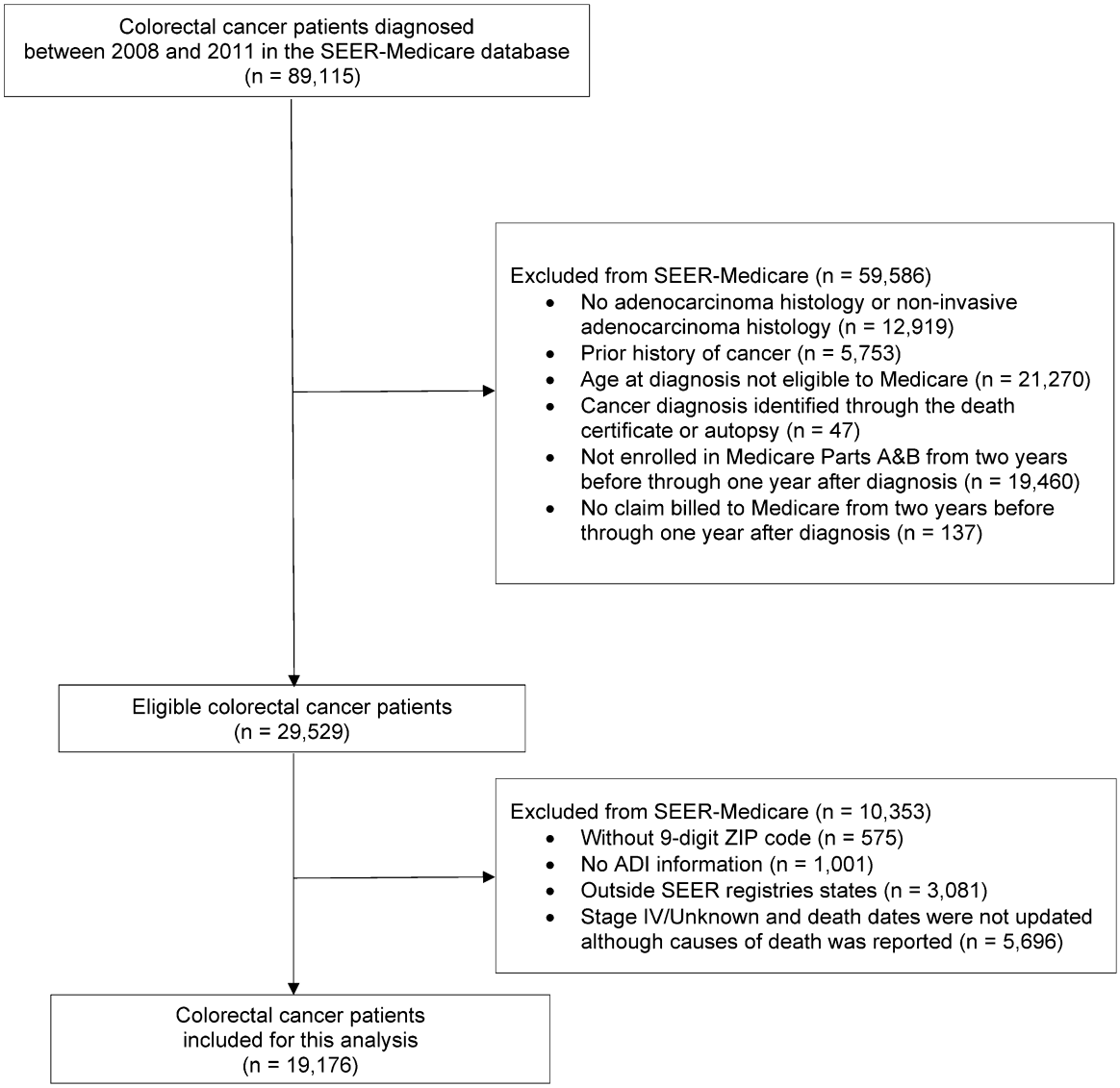
D



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eTable 1. Distribution of Medicare-Medicaid Dual Eligibility by Area Deprivation Index Among Cancer Patients

Breast			ADI			P-value [a]
Dual Eligibility	Q1	Q2	Q3	Q4	Q5	<0.001
No	4,876 (90.7)	4,252 (86.3)	4,652 (88.1)	4,525 (87.4)	4,147 (79.7)	
Yes	499 (9.3)	677 (13.7)	627 (11.9)	654 (12.6)	1,059 (20.3)	
Prostate						
Dual Eligibility	Q1	Q2	Q3	Q4	Q5	<0.001
No	6,740 (93.5)	5,996 (90.3)	6,730 (92.4)	6,384 (92.4)	6,120 (86.1)	
Yes	469 (6.5)	644 (9.7)	554 (7.6)	523 (7.6)	989 (13.9)	
Lung						
Dual Eligibility	Q1	Q2	Q3	Q4	Q5	<0.001
No	2,758 (84.2)	2,839 (83.7)	2,855 (86.0)	2,811 (83.0)	2,433 (73.5)	
Yes	516 (15.8)	553 (16.3)	465 (14.0)	576 (17.01)	878 (26.5)	
Colorectal						
Dual Eligibility	Q1	Q2	Q3	Q4	Q5	<0.001
No	3,276 (83.3)	2,964 (81.1)	3,404 (85.3)	3,172 (84.2)	2,976 (77.8)	
Yes	659 (16.7)	692 (18.9)	586 (14.7)	597 (15.8)	850 (22.2)	

Abbreviations: ADI, Area Deprivation Index; Q1, quintile 1; Q2, quintile 2; Q3, quintile 3; Q4, quintile 4; Q5, quintile 5

[a] P-values were calculated using the chi-squared test.

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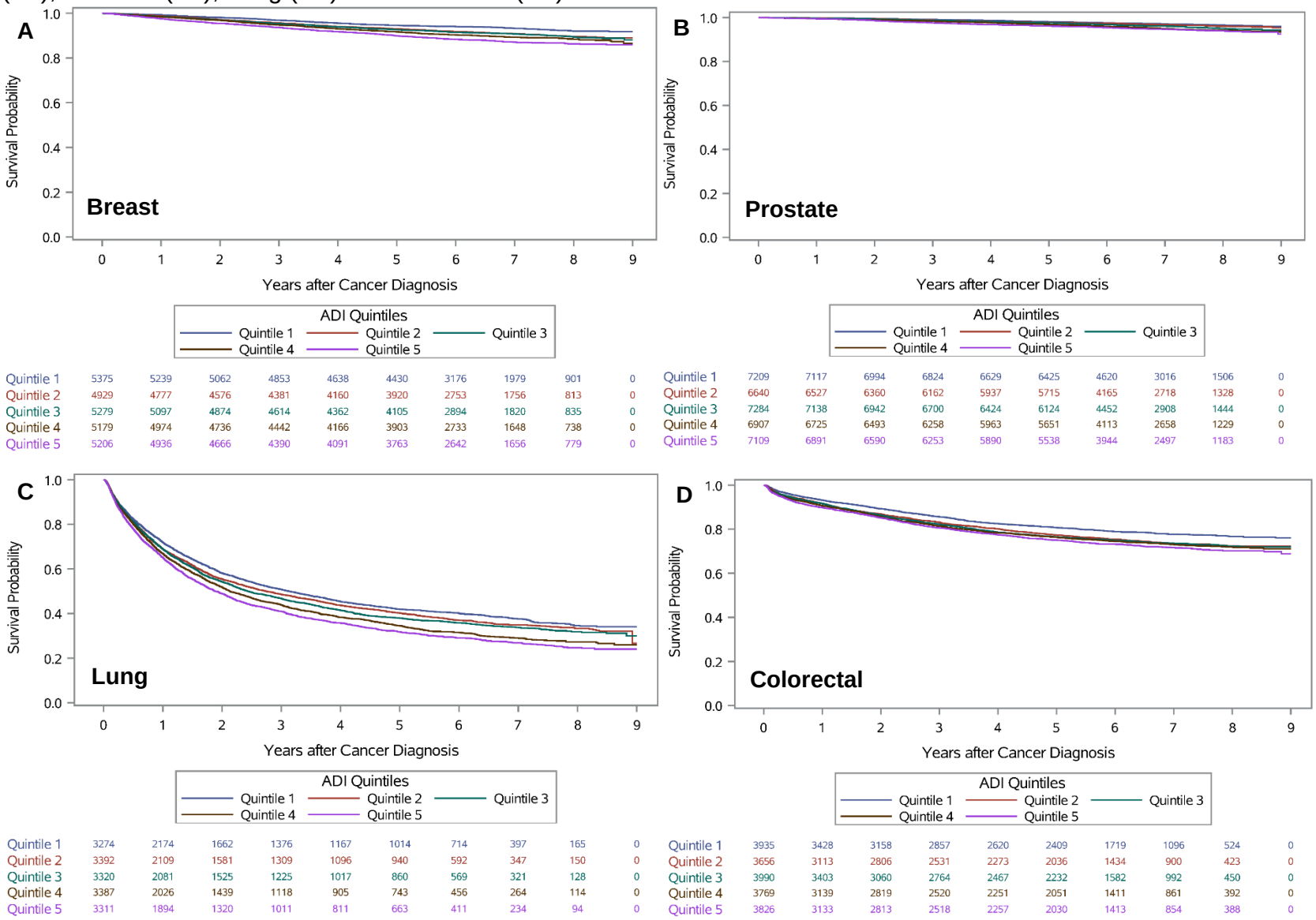
eFigure 2. Kaplan-Meier Estimates for Cancer-Specific Survival by Quintiles of Area Deprivation Index Among Breast (1A), Prostate (1B), Lung (1C) and Colorectal (1D) Cancer



Abbreviation: ADI, area deprivation index. Cancer-specific survival by quintiles of ADI for breast (Figure 1A; N = 25,968), prostate (Figure 1B; N = 35,150), lung (Figure 1C; N = 16,684), and colorectal cancer (Figure 1D; N = 19,176). *P*-values for each cancer were calculated using the log-rank test, and all were significant (*P*-value <0.001).

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eTable 2. Unadjusted Hazard Ratios of Area Deprivation Index and Medicare-Medicaid Dual Eligibility Associated with Mortality

	Overall Mortality										
	Breast	*P*-value		Prostate	*P*-value		Lung	*P*-value		CRC	*P*-value
ADI											
Q1	1.00			1.00			1.00			1.00	
Q2	1.20 (1.12-1.29)	<0.001		1.22 (1.14-1.30)	<0.001		1.11 (1.05-1.17)	<0.001		1.16 (1.09-1.23)	<0.001
Q3	1.30 (1.22-1.39)	<0.001		1.40 (1.31-1.49)	<0.001		1.15 (1.09-1.22)	<0.001		1.17 (1.10-1.24)	<0.001
Q4	1.46 (1.36-1.55)	<0.001		1.62 (1.52-1.73)	<0.001		1.29 (1.22-1.36)	<0.001		1.23 (1.16-1.30)	<0.001
Q5	1.61 (1.51-1.71)	<0.001		1.95 (1.83-2.07)	<0.001		1.38 (1.31-1.46)	<0.001		1.26 (1.19-1.33)	<0.001
DE											
No	1.00			1.00			1.00			1.00	
Yes	1.70 (1.61-1.79)	<0.001		1.55 (1.47-1.65)	<0.001		1.31 (1.26-1.37)	<0.001		1.34 (1.28-1.40)	<0.001
	Cancer-Specific Mortality										
	Breast[b]	*P*-value		Prostate[c]	*P*-value		Lung	*P*-value		CRC	*P*-value
ADI											
Q1	1.00			1.00			1.00			1.00	
Q2	1.36 (1.18-1.58)	<0.001		1.12 (0.92-1.37)	0.24		1.07 (1.01-1.14)	0.03		1.21 (1.09-1.33)	<0.001
Q3	1.40 (1.22-1.62)	<0.001		1.39 (1.15-1.67)	<0.001		1.11 (1.05-1.19)	<0.001		1.24 (1.12-1.36)	<0.001
Q4	1.60 (1.39-1.84)	<0.001		1.70 (1.42-2.04)	<0.001		1.23 (1.15-1.31)	<0.001		1.27 (1.15-1.40)	<0.001
Q5	1.93 (1.68-2.20)	<0.001		1.89 (1.59-2.25)	<0.001		1.32 (1.24-1.41)	<0.001		1.35 (1.23-1.49)	<0.001
DE											
No	1.00			1.00			1.00			1.00	
Yes	1.93 (1.75-2.14)	<0.001		1.52 (1.29-1.79)	<0.001		1.31 (1.24-1.37)	<0.001		1.38 (1.28-1.49)	<0.001

Abbreviations: ADI, area deprivation index; DE, Medicare-Medicaid dual eligibility; CRC, colorectal cancer; Q1, quintile 1; Q2, quintile 2; Q3, quintile 3; Q4, quintile 4; Q5, quintile 5.

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eTable 3. Non-Mutually Adjusted Hazard Ratios[a] of Area Deprivation Index and Medicare-Medicaid Dual Eligibility Associated with Mortality

	Overall Mortality										
	Breast[b]	*P*-value		Prostate[c]	*P*-value		Lung	*P*-value		CRC	*P*-value
ADI											
Q1	1.00			1.00			1.00			1.00	
Q2	1.12 (1.05-1.20)	<0.001		1.12 (1.05-1.20)	0.001		1.08 (1.03-1.14)	0.003		1.16 (1.09-1.23)	<0.001
Q3	1.19 (1.12-1.28)	<0.001		1.28 (1.19-1.36)	<0.001		1.10 (1.04-1.16)	0.001		1.18 (1.11-1.25)	<0.001
Q4	1.32 (1.23-1.41)	<0.001		1.36 (1.28-1.46)	<0.001		1.21 (1.15-1.28)	<0.001		1.23 (1.16-1.31)	<0.001
Q5	1.36 (1.27-1.46)	<0.001		1.53 (1.44-1.64)	<0.001		1.22 (1.16-1.29)	<0.001		1.25 (1.18-1.33)	<0.001
DE											
No	1.00			1.00			1.00			1.00	
Yes	1.24 (1.17-1.31)	<0.001		1.32 (1.24-1.41)	<0.001		1.16 (1.10-1.21)	<0.001		1.24 (1.17-1.30)	<0.001
	Cancer-Specific Mortality										
	Breast[b]	*P*-value		Prostate[c]	*P*-value		Lung	*P*-value		CRC	*P*-value
ADI											
Q1	1.00			1.00			1.00			1.00	
Q2	1.21 (1.05-1.40)	0.009		1.01 (0.83-1.23)	0.94		1.05 (0.98-1.12)	0.15		1.21 (1.10-1.34)	<0.001
Q3	1.22 (1.05-1.40)	0.007		1.22 (1.02-1.47)	0.03		1.07 (1.00-1.14)	0.04		1.27 (1.15-1.40)	<0.001
Q4	1.35 (1.17-1.55)	<0.001		1.35 (1.12-1.62)	0.001		1.17 (1.10-1.25)	<0.001		1.28 (1.16-1.41)	<0.001
Q5	1.52 (1.33-1.75)	<0.001		1.40 (1.17-1.68)	<0.001		1.17 (1.10-1.25)	<0.001		1.35 (1.22-1.49)	<0.001
DE											
No	1.00			1.00			1.00			1.00	
Yes	1.26 (1.12-1.41)	<0.001		1.30 (1.08-1.57)	0.005		1.15 (1.09-1.22)	<0.001		1.30 (1.20-1.41)	<0.001

Abbreviations: ADI, area deprivation index; DE, Medicare-Medicaid dual eligibility; CRC, colorectal cancer; Q1, quintile 1; Q2, quintile 2; Q3, quintile 3; Q4, quintile 4; Q5, quintile 5.

[a] Adjustment for age, sex, race/ethnicity, marital status, stage. Elixhauser comorbidity index, surgery, radiotherapy, and chemotherapy. ADI and dual eligibility were not mutually adjusted.

[b] For breast cancer, hormone receptor status was additionally adjusted.

[c] For prostate cancer, androgen deprivation therapy was additionally adjusted.

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