

Supplemental Online Content

Lawrence WR, McGee-Avila JK, Vo JB, et al. Trends in cancer mortality among Black individuals in the US from 1999 to 2019. *JAMA Oncol*. Published online May 19, 2022. doi:10.1001/jamaoncol.2022.1472

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

eTable 1. Cancer mortality by site based on ICD-10 codes	
SEER Cause of Death Label	ICD-10
All Malignant Cancers	C00-C97
Breast	C50
Cervix Uteri	C53
Colon and Rectum	C18, C20
Corpus and Uterus, NOS	C54-C55
Kidney and Renal Pelvis	C64-C65
Leukemia	C91-C95
Liver and Intrahepatic Bile	C22
Lung and Bronchus	C34
Non-Hodgkin Lymphoma	C82, C83, C85
Ovary	C56
Pancreas	C25
Prostate	C61
Stomach	C16
Urinary Bladder	C67
<i>Abbreviations:</i> ICD-10, International Statistical Classification of Diseases and Related Health Problems, Tenth Revision	

eTable 2. Age-adjusted mortality rates for the most common causes of cancer death by sex among Black individuals in the United States, 1999-2019		
	1999-2019 (Per 100,000)	
cancer site or type	Men	Women
All malignant cancers	377.3	239.4
Lung and Bronchus	104.2	49.9
Prostate	68.5	NA
Female Breast	NA	43.6
Colon and Rectum	38.7	26.1
Pancreas	21.8	17.6
Ovary	NA	9.4
Leukemia	10.8	6.5
Corpus and Uterus, NOS	NA	11.3
Liver and intrahepatic bile duct	17.4	6.2
Non-Hodgkin Lymphoma	8.2	5.1
Urinary Bladder	7.7	3.6
Kidney and Renal Pelvis	8.0	3.5
Stomach	13.4	6.4
Myeloma	11.1	7.9
Cervix Uteri	NA	5.8

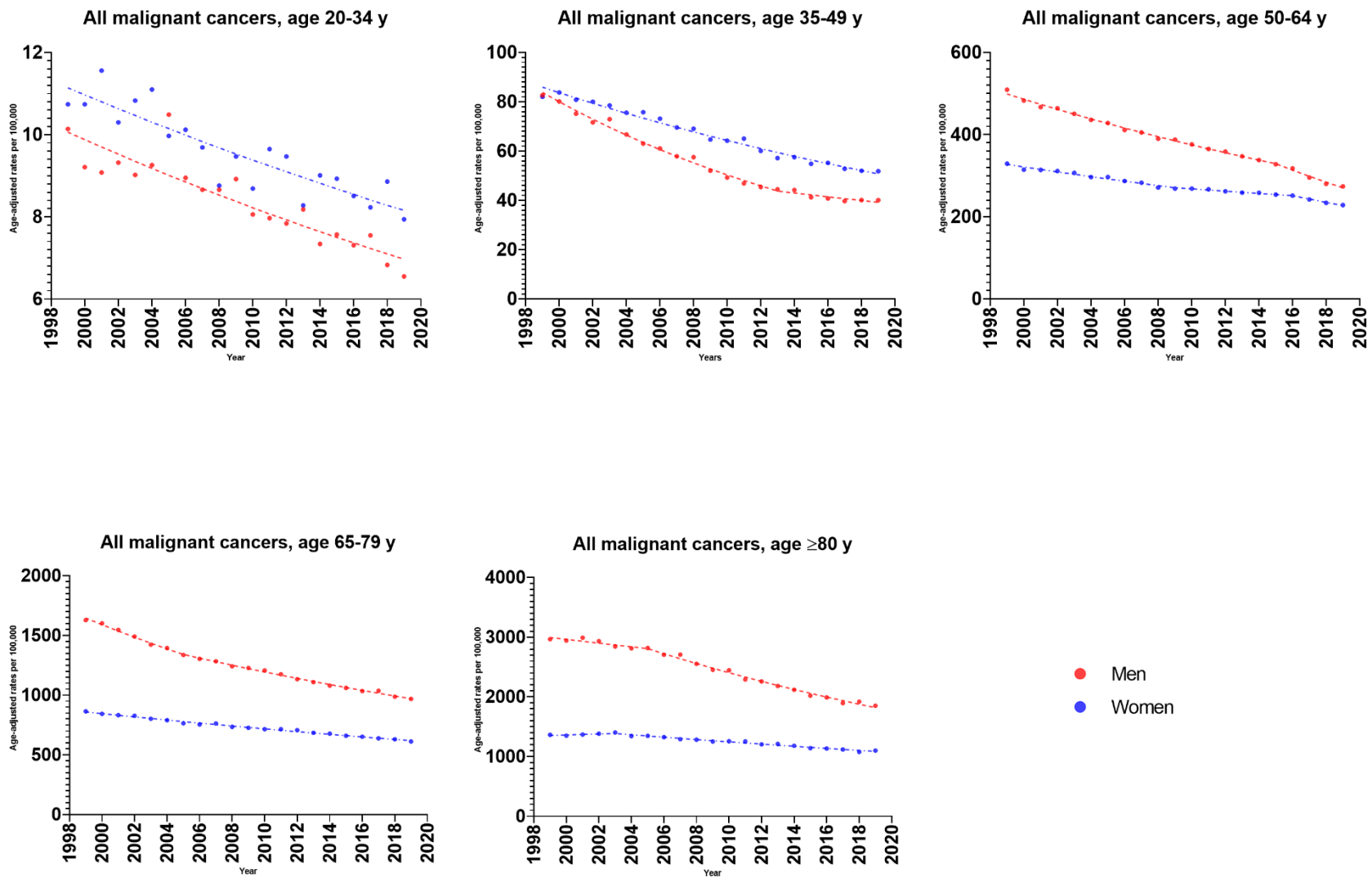
Rates are per 100,000 and age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130) standard.
Abbreviation: NOS = not otherwise specified; NA, not applicable

eTable 3. Annual percentage changes in cancer death rates by sex and cancer site among Black individuals from 1999 to 2019 in the United States									
Cause of death	Average APC from (1999-2019)	Segment 1		Segment 2		Segment 3		Segment 4	
All Malignant Cancers									
	-2.0 (-2.1, -2.0)	1999-2019	-2.0 (-2.1, -2.0)	NA	NA	NA	NA	NA	NA
Men									
Overall cancer	-2.6 (-2.6, -2.6)	1999-2019	-2.6 (-2.6, -2.6)	NA	NA	NA	NA	NA	NA
Prostate	-3.4 (-3.8, -3.0)	1999-2014	-4.0 (-4.3, -3.7)	2014-2019	-1.6 (-3.3, 0.0)	NA	NA	NA	NA
Colon and Rectum	-2.6 (-2.7, -2.4)	1999-2019	-2.6 (-2.7, -2.4)	NA	NA	NA	NA	NA	NA
Kidney and Renal Pelvis	-1.1 (-1.4, -0.8)	1999-2019	-1.1 (-1.4, -0.8)	NA	NA	NA	NA	NA	NA
Pancreas	-0.2 (-0.4, -0.1)	1999-2019	-0.2 (-0.4, -0.1)	NA	NA	NA	NA	NA	NA
Lung and Bronchus	-3.8 (-4.0, -3.6)	1999-2003	-2.5 (-3.2, -1.8)	2003-2013	-3.3 (-3.5, -3.1)	2013-2019	-5.5 (-5.9, -5.1)	NA	NA
Liver and Intrahepatic Bile	1.7 (1.4, 2.0)	1999-2013	3.0 (2.7, 3.3)	2013-2019	-1.3 (-2.1, -0.4)	NA	NA	NA	NA
Urinary Bladder	-0.4 (-0.7, -0.0)	1999-2019	-0.4 (-0.7, -0.0)	NA	NA	NA	NA	NA	NA
Stomach	-3.2 (-3.4, -3.0)	1999-2019	-3.2 (-3.4, -3.0)	NA	NA	NA	NA	NA	NA
Leukemia	-1.6 (-2.1, -1.1)	1999-2008	-0.6 (-1.6, 0.3)	2008-2019	-2.4 (-3.1, -1.8)	NA	NA	NA	NA
Non-Hodgkin Lymphoma	-1.8 (-2.1, -1.4)	1999-2019	-1.8 (-2.1, -1.4)	NA	NA	NA	NA	NA	NA
Myeloma	-1.0 (-1.2, -0.8)	1999-2019	-1.0 (-1.2, -0.8)	NA	NA	NA	NA	NA	NA
Women									
Overall cancer	-1.5 (-1.7, -1.3)	1999-2002	-0.9 (-2.1, 0.2)	2002-2019	-1.6 (-1.7, -1.5)	NA	NA	NA	NA
Breast	-1.4 (-1.5, -1.3)	1999-2019	-1.4 (-1.5, -1.3)	NA	NA	NA	NA	NA	NA
Colon and Rectum	-3.0 (-3.2, -2.9)	1999-2019	-3.0 (-3.2, -2.9)	NA	NA	NA	NA	NA	NA
Kidney and Renal Pelvis	-1.8 (-2.4, -1.1)	1999-2011	-0.8 (-1.6, -0.1)	2011-2019	-3.1 (-4.5, -1.8)	NA	NA	NA	NA
Pancreas	-0.2 (-0.3, -0.1)	1999-2019	-0.2 (-0.3, -0.1)	NA	NA	NA	NA	NA	NA
Lung and Bronchus	-2.0 (-2.3, -1.8)	1999-2005	0.1 (-0.5, 0.7)	2005-2013	-1.9 (-2.3, -1.4)	2013-2019	-4.4 (-4.9, -3.8)	NA	NA

Liver and Intrahepatic Bile	1.1 (0.0, 2.3)	1999-2017	1.8 (1.3, 2.2)	2017-2019	-4.4 (-14.7, 7.2)	NA	NA	NA	NA
Urinary Bladder	-1.4 (-1.8, -1.1)	1999-2019	-1.4 (-1.8, -1.1)	NA	NA	NA	NA	NA	NA
Stomach	-3.4 (-3.6, -3.2)	1999-2019	-3.4 (-3.6, -3.2)	NA	NA	NA	NA	NA	NA
Ovary	-1.3 (-2.9, -0.4)	1999-2004	1.0 (-0.9, 3.0)	2004-2007	-4.7 (-12.5, 3.8)	2007-2010	0.9 (-7.3, 9.9)	2010-2019	-2.2 (-2.9, -1.4)
Cervix Uteri	-2.5 (-2.8, -2.2)	1999-2019	-2.5 (-2.8, -2.2)	NA	NA	NA	NA	NA	NA
Corpus and Uterus, NOS	1.3 (0.5, 2.2)	1999-2009	0.6 (-0.1, 1.1)	2009-2012	4.0 (-1.9, 10.4)	2012-2019	1.3 (0.6, 2.0)	NA	NA
Leukemia	-1.4 (-1.6, -1.1)	1999-2019	-1.4 (-1.6, -1.1)	NA	NA	NA	NA	NA	NA
Non-Hodgkin Lymphoma	-2.0 (-2.3, -1.8)	1999-2019	-2.0 (-2.3, -1.8)	NA	NA	NA	NA	NA	NA
Myeloma	-1.7 (-2.8, -0.7)	1999-2009	-2.6 (-3.4, -1.8)	2009-2013	2.5 (-2.6, 7.9)	2013-2019	-3.1 (-4.7, -1.5)	NA	NA

Segments were chosen by Joinpoint regression.

Abbreviations: APC, Annual percentage change; NA, not applicable



eFigure 1. Trends in age-standardized cancer death rates (1999-2019) among Black individuals by age group. Death rates covered the entire US population. Trends were estimated using joinpoint regression and characterized by rate per 100,000.
Note: “---“represents modeled age-adjusted and “●” represents observed age-adjusted rates.

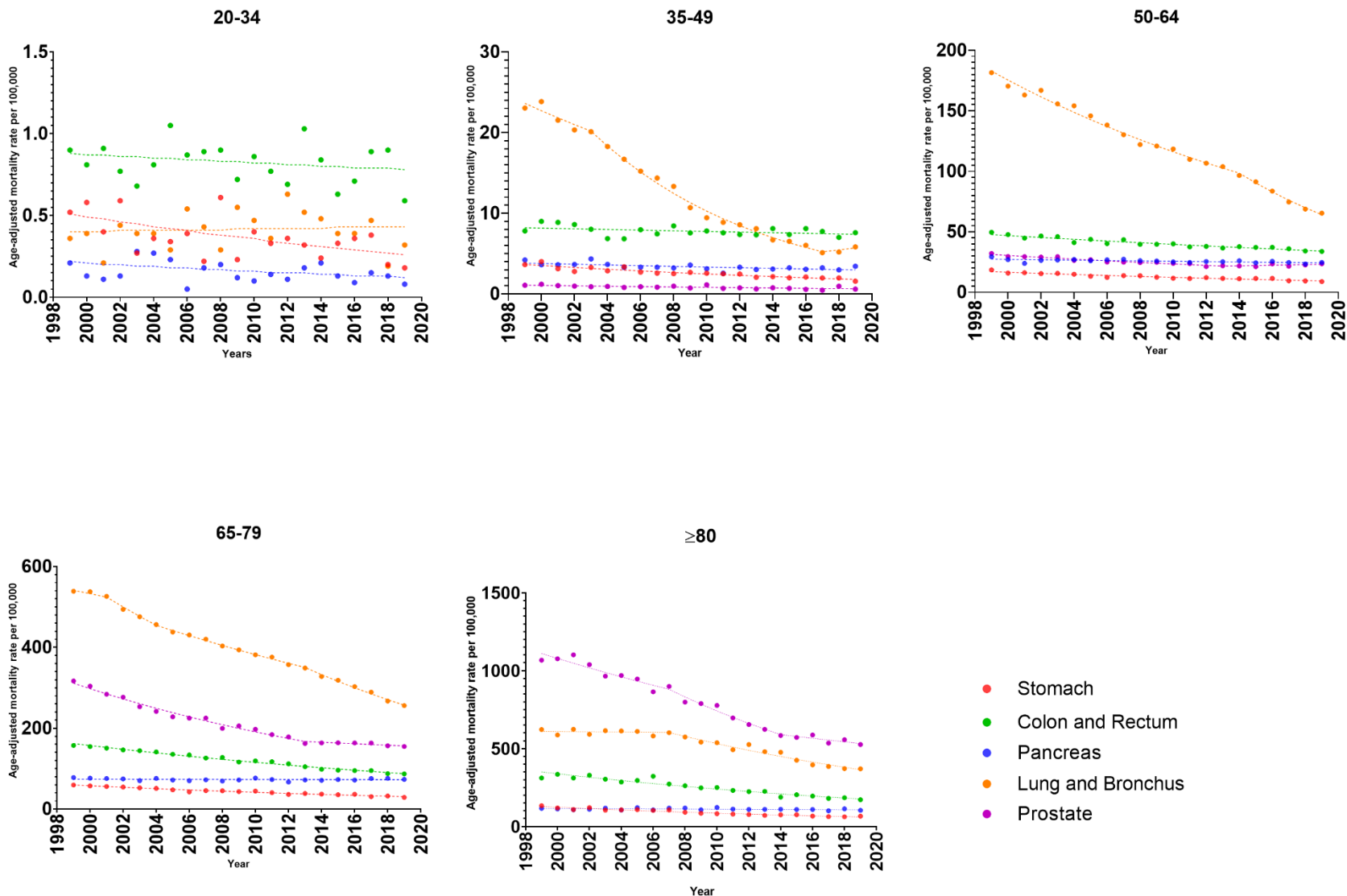
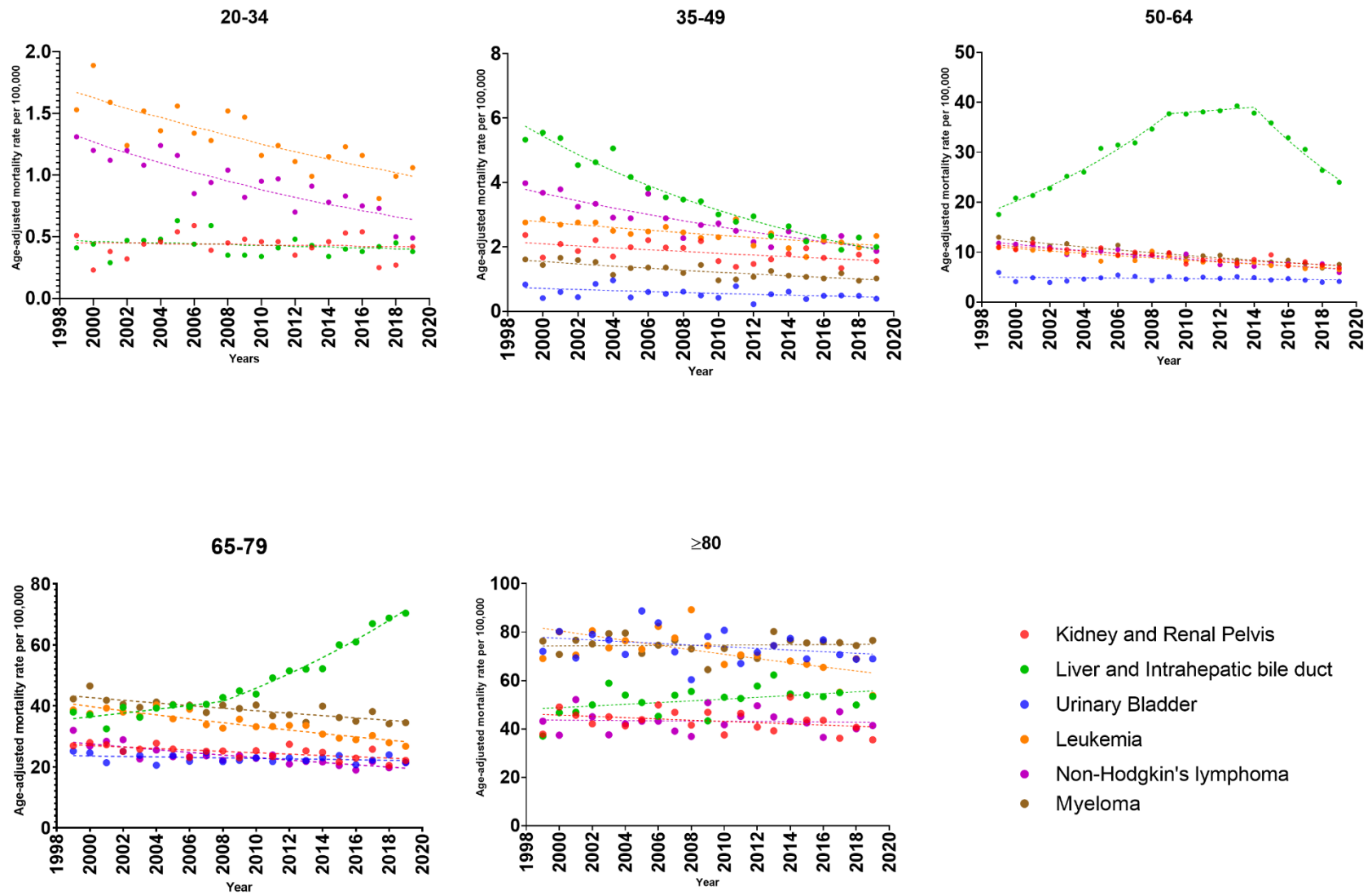
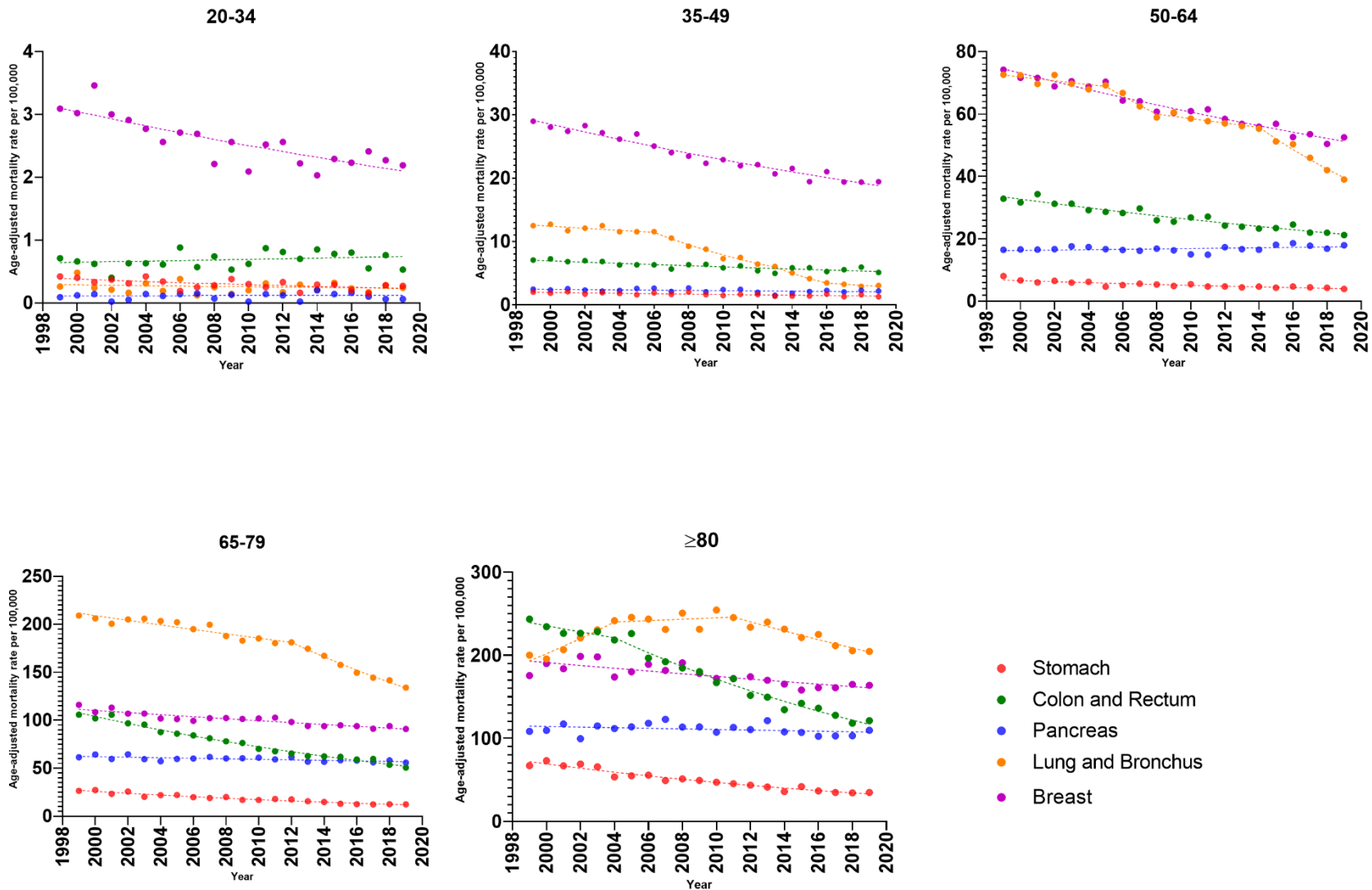


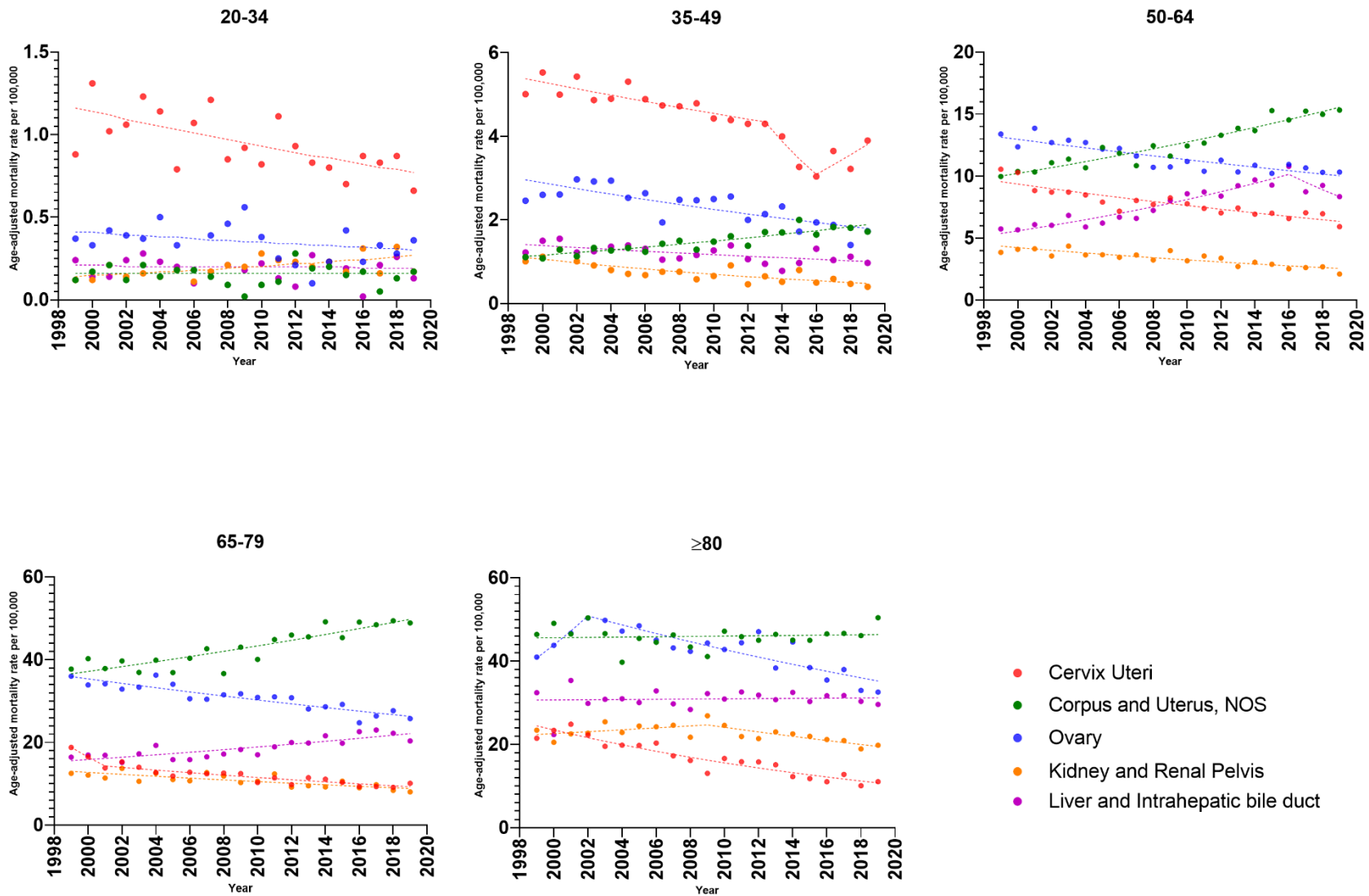
Figure 2. Trends in age-standardized death rates (1999-2019) among Black men by cancer site and age group. Death rates covered the entire US population. Trends were estimated using joinpoint regression and characterized by rate per 100,000. Note: “---” represents modeled age-adjusted and “●” represents observed age-adjusted rates.



(Continued) eFigure 2. Trends in age-standardized death rates (1999-2019) among Black men by cancer site and age group. Death rates covered the entire US population. Trends were estimated using joinpoint regression and characterized by rate per 100,000. Note: “---“represents modeled age-adjusted and “●“ represents observed age-adjusted rates.

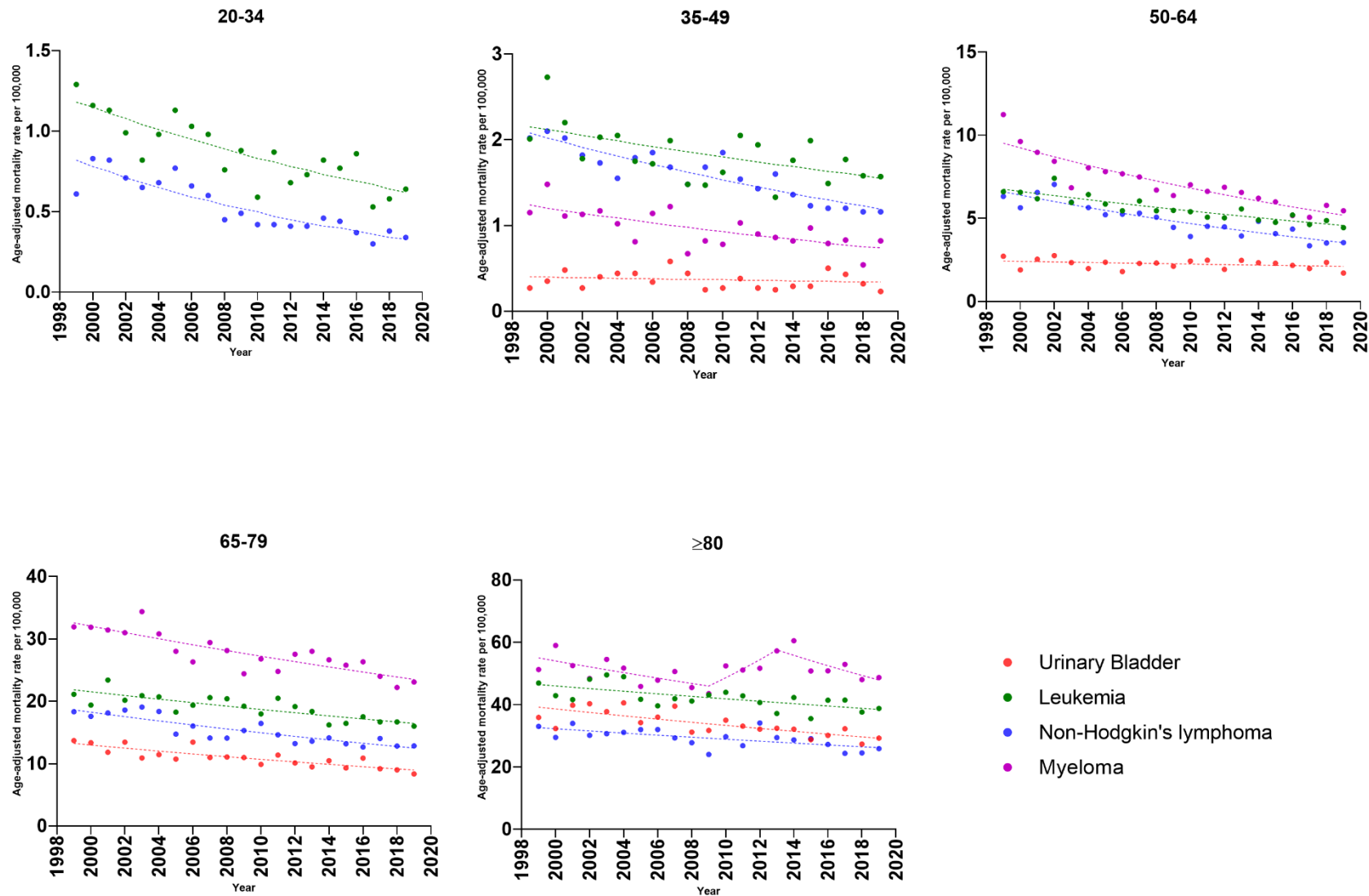


eFigure 3. Trends in age-standardized death rates (1999-2019) among Black women by cancer site and age group. Death rates covered the entire US population. Trends were estimated using joinpoint regression and characterized by rate per 100,000. Note: “---” represents modeled age-adjusted and “●” represents observed age-adjusted rates



(Continued) eFigure 3. Trends in age-standardized death rates (1999-2019) among Black women by cancer site and age group. Death rates covered the entire US population. Trends were estimated using joinpoint regression and characterized by rate per 100,000.

Note: “---“represents modeled age-adjusted and “●” represents observed age-adjusted rates.



(Continued) eFigure 3. Trends in age-standardized death rates (1999-2019) among Black women by cancer site and age group. Death rates covered the entire US population. Trends were estimated using joinpoint regression and characterized by rate per 100,000. Note: “---“represents modeled age-adjusted and “●” represents observed age-adjusted rates.