

Sister Study Anal Cancer Outcomes (any behavior)¹ and Characteristics: Data Release 9.1²

	N	% of cohort
Total Cases³	38	0.07
Timing, Behavior, and Site	N	% of cases
Baseline	8	21.1
Invasive – Unknown ⁴	7	18.4
<i>In situ</i> – Anus	1	2.6
Incident	30	78.9
Invasive	26	68.4
Anal canal	3	7.9
Cloacogenic zone	1	2.6
Overlapping sites (anorectum)	5	13.2
Unknown ⁴	17	44.7
<i>In situ</i> – Anus	4	10.5
Incident	30	
Race/Ethnicity⁵		
Non-Hispanic White	28	93.3
Non-Hispanic Black	1	3.3
Hispanic	1	3.3
Other	0	0.0
Age (in years) at Diagnosis⁶		
Under 50	2	6.7
50-64	13	43.3
65 and older	15	50.0
Diagnosis Confirmation⁷		
Medical	18	60.0
NDI Plus or death certificate only	1	3.3
None	11	36.7
Incident – Medically Confirmed	18	
Stage at Diagnosis⁸		
0	3	23.1
I	4	30.8
II	4	30.8
III	2	15.4
IV	0	0.0
Missing, cannot stage	5	

¹ Cancer events are defined by the following ICD10 cancer codes: invasive anus (C21), *in situ* anus (D01.3). Other ICD10 cancer codes that may be used when anus is indicated as one of the favored primary sites: invasive intestine (C26.0), invasive digestive organ (C26.9), invasive unspecified site (C80), *in situ* intestine (D01.4), *in situ* digestive organ (D01.9), uncertain behavior of digestive organ (D37.8, D37.9), unspecified behavior of digestive organ (D49.0).

² Data release 9.1 includes outcomes from follow-up phases that closed on or before 9/30/2019

³ Excludes cancer diagnoses where anal site of origin could not be ruled out, but it is not the favored site [n=12].

⁴ Unknown site generally includes anus - not specified, with the following exceptions: baseline includes unspecified intestine [n=3] and anus or rectum [n=2]; incident includes anus or rectum [n=1]

⁵ Race/ethnicity: precedence given to Hispanic ethnicity first, then Black race, then other race, then White race

⁶ For those missing age at diagnosis [n=1], age was imputed as the midpoint of the range of plausible ages at diagnosis

⁷ Medical confirmation of reported anal cancer is generally from pathology report but may include other medical documentation; National Death Index (NDI) Plus or death certificate confirmation is specific to cases that do not have medical confirmation

⁸ Stage at diagnosis is only available for cases with medical confirmation

Sister Study First Invasive Anal Cancer Outcomes¹ and Characteristics: Data Release 9.1²

	N	% of cohort
Total Cases³	34	0.07
Timing, Behavior, and Site	N	% of cases
Baseline – Invasive – Unknown ⁴	7	20.6
Incident – Invasive	27	79.4
Anal canal	3	8.8
Cloacogenic zone	1	2.9
Overlapping sites (anorectum)	5	14.7
Unknown ⁴	18	52.9
Incident	27	
Race/Ethnicity⁵		
Non-Hispanic White	25	92.6
Non-Hispanic Black	1	3.7
Hispanic	1	3.7
Other	0	0.0
Age (in years) at Diagnosis⁶		
Under 50	2	7.4
50-64	10	37.0
65 and older	15	55.6
Diagnosis Confirmation⁷		
Medical	16	59.3
NDI Plus or death certificate only	1	3.7
None	10	37.0
Incident – Medically Confirmed	16	
Stage at Diagnosis⁸		
I	5	45.5
II	4	36.4
III	2	18.2
IV	0	0.0
Missing, cannot stage	5	

¹ Cancer events are defined by the following ICD10 cancer code: invasive anus (C21). Other ICD10 cancer codes that may be used when anus is indicated as one of the favored primary sites: invasive intestine (C26.0), invasive digestive organ (C26.9), invasive unspecified site (C80), uncertain behavior of digestive organ (D37.8, D37.9), unspecified behavior of digestive organ (D49.0).

² Data release 9.1 includes outcomes from follow-up phases that closed on or before 9/30/2019

³ Excludes cancer diagnoses where anal site of origin could not be ruled out, but it is not the favored site [n=12].

⁴ Unknown site generally includes anus - not specified, with the following exceptions: baseline includes unspecified intestine [n=3] and anus or rectum [n=2]; incident includes anus or rectum [n=1]

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