

Sister Study Anal Cancer Outcomes (any behavior)¹ and Characteristics: Data Release 10.1²

	N	% of cohort
Total Cases³	44	0.09
Timing, Behavior, and Site	N	% of cases
Baseline	8	18.2
Invasive – Unknown ⁴	7	15.9
<i>In situ</i> – Anus	1	2.3
Unknown timing ⁵ – Invasive – Unknown ⁴	1	2.3
Incident	35	79.5
Invasive	29	65.9
Anal canal	7	15.9
Cloacogenic zone	1	2.3
Overlapping sites (anorectum)	7	15.9
Unknown ⁴	14	31.8
<i>In situ</i> – Anus	6	13.6
Incident	35	
Race/Ethnicity⁶		
Non-Hispanic White	33	94.3
Non-Hispanic Black	1	2.9
Hispanic	1	2.9
Other	0	0.0
Age (in years) at Diagnosis		
Under 50	1	2.9
50-64	14	40.0
65 and older	20	57.1
Diagnosis Confirmation⁷		
Medical	25	71.4
NDI Plus or death certificate only	1	2.9
None	9	25.7
Incident – Medically Confirmed	25	
Stage at Diagnosis⁸		
0	5	27.8
I	4	22.2
II	6	33.3
III	2	11.1
IV	1	5.6
Missing, cannot stage	7	

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 10.1 includes outcomes from follow-up phases that closed on or before 10/12/2020, excluding all data from participants who have withdrawn their data from the study (n=4).

³ Excludes cancer diagnoses where anal site of origin could not be ruled out, but it is not the favored site [n=11].

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

⁵ Unknown timing represents cases that are unknown if diagnosis at or prior to baseline vs. post-baseline (i.e. incident case)

⁶ Race/ethnicity: precedence given to Hispanic ethnicity first, then Black race, then other race, then White race

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 10.1²

	N	% of cohort
Total Cases³	39	0.08
Timing, Behavior, and Site	N	% of cases
Baseline – Invasive – Unknown ⁴	7	17.9
Unknown timing ⁵ – Invasive – Unknown ⁴	1	2.6
Incident – Invasive	31	79.5
Anal canal	7	17.9
Cloacogenic zone	1	2.6
Overlapping sites (anorectum)	7	17.9
Unknown ⁴	16	41.0
Incident	31	
Race/Ethnicity⁶		
Non-Hispanic White	29	93.5
Non-Hispanic Black	1	3.2
Hispanic	1	3.2
Other	0	0.0
Age (in years) at Diagnosis		
Under 50	1	3.2
50-64	10	32.3
65 and older	20	64.5
Diagnosis Confirmation⁷		
Medical	22	71.0
NDI Plus or death certificate only	1	3.2
None	8	25.8
Incident – Medically Confirmed	22	
Stage at Diagnosis⁸		
I	6	40.0
II	6	40.0
III	2	13.3
IV	1	6.7
Missing, cannot stage	7	

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 10.1 includes outcomes from follow-up phases that closed on or before 10/12/2020, excluding all data from participants who have withdrawn their data from the study (n=4).

³ Excludes cancer diagnoses where anal site of origin could not be ruled out, but it is not the favored site [n=11].

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

⁵ Unknown timing represents cases that are unknown if diagnosis at or prior to baseline vs. post-baseline (i.e. incident case)

⁶ Race/ethnicity: precedence given to Hispanic ethnicity first, then Black race, then other race, then White race

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