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Table 1.1: Specimen Availability By Confirmed Cancer, Including Tumor Registry Data (Incidence to 2016/2017)

		Serum (Pre-DX)	EDTA Plasma (Pre-DX)	Heparin Plasma (Pre-DX)	Serum + DNA (Pre-DX)	Any DNA	In PLCO Total GWAS
Cancer Type	Cancer/Adenoma Category						
Prostate	PLCO	4587	2817	4460	4356	8044	7810
Lung	PLCO	2077	1412	1657	1803	2760	2969
Colon	PLCO	1081	670	1054	968	1980	2123
Ovary (Including Extra)	PLCO	301	203	298	275	482	468
Ovary LMP	PLCO	19	3	17	17	30	31
Oral Cavity/Tonsil/Pharynx	Head and Neck	286	223	280	268	446	454
Larynx	Head and Neck	129	80	124	116	178	179
Pancreas	Digestive System	504	363	483	440	753	691
Esophagus	Digestive System	177	131	174	154	234	264
Stomach	Digestive System	241	176	232	216	328	343
Small Intestine	Digestive System	79	60	75	73	133	130
Liver/Intrahepatic Bile Duct	Digestive System	172	127	125	149	262	261
Gallbladder	Digestive System	42	34	33	40	64	64
Other Biliary	Digestive System	84	57	72	70	105	102
Melanoma	Skin	1177	895	1157	1134	2227	2209
Female Breast (Invasive)	Breast	2011	1436	1938	1921	3717	3686
Female Breast (In Situ)	Breast	541	367	519	517	947	944
Male Breast	Breast	28	22	28	25	36	39
Endometrium	Female Genital	402	257	391	379	773	785
Bladder	Urinary System	1004	753	971	956	1891	1825
Kidney and Renal Pelvis	Urinary System	506	379	495	455	798	879
Glioma	Brain	203	141	197	161	264	287
Thyroid	Endocrine System	164	131	161	160	335	336
Hodgkin's Lymphoma	Lymphoids	30	21	29	29	57	54
Multiple Myeloma	Lymphoids	304	240	297	277	484	454
Non-Hodgkin's Lymphoma	Lymphoids	858	632	840	798	1587	1569
Chronic Lymphocytic Leukemia	Lymphoids	310	208	295	284	549	546
Acute Myeloid Leukemia	Lymphoids	167	129	163	150	273	259
Other Leukemia	Lymphoids	389	311	380	361	683	659
Prevalent Adenoma: All	Adenoma	4162	0	4023	3868	4299	4317
Prevalent Adenoma: Adv.	Adenoma	1631	0	1596	1518	1690	1687
Incident Adenoma: All	Adenoma	1212	1054	1187	1169	1240	1237
Incident Adenoma: Adv.	Adenoma	286	255	284	281	297	295
Recurrent Adenoma: All	Adenoma	882	546	864	837	893	893
Recurrent Adenoma: Adv.	Adenoma	222	133	216	210	225	225
Recurrent Control	Adenoma	890	731	877	845	901	904

Serum/Plasma availability based on subjects with prediagnostic specimen, baseline questionnaire, and biochemical consent. Subjects with rare cancer are excluded from having biochemical specimen in non-rare sites.

Serum and Plasma are considered available if there are 2+ parent vials that did not undergo an uncontrolled thaw in a study year, or if 1.1+ mL of material from aliquots are available.

Exception to the above: Plasma is considered available in T4 if the sole parent vial collected did not undergo an uncontrolled thaw, or if 1.8+ mL of plasma from aliquots are available.

DNA availability is based on subjects with genetic consent and DNA Source, Extracted DNA or Pending DNA from either arm.

Table 1.2: Specimen Availability By Cancer Cause of Death (Incidence to 2016/2017 . Mortality through 12/31/2018)

		<i>Serum (Pre-DX)</i>	<i>EDTA Plasma (Pre-DX)</i>	<i>Heparin Plasma (Pre-DX)</i>	<i>Serum + DNA (Pre-DX)</i>	<i>Any DNA (W/ DX)</i>	<i>In PLCO Total GWAS (W/ DX)</i>	<i>Any DNA*</i>	<i>In PLCO Total GWAS*</i>
<i>Prostate</i>	<i>PLCO</i>	296	157	289	273	505	499	578	572
<i>Lung</i>	<i>PLCO</i>	1492	1001	1173	1255	1804	1985	2356	2511
<i>Colon</i>	<i>PLCO</i>	281	168	271	225	449	505	588	629
<i>Ovary (Including Extra)</i>	<i>PLCO</i>	209	135	208	188	310	293	366	350
<i>Oral Cavity/Tonsil/Pharynx</i>	<i>Head and Neck</i>	67	53	64	61	83	88	116	119
<i>Larynx</i>	<i>Head and Neck</i>	22	12	20	19	25	26	35	35
<i>Pancreas</i>	<i>Digestive System</i>	435	315	417	378	651	597	914	850
<i>Esophagus</i>	<i>Digestive System</i>	123	88	119	106	151	174	245	269
<i>Stomach</i>	<i>Digestive System</i>	108	80	103	89	128	140	179	186
<i>Small Intestine</i>	<i>Digestive System</i>	12	7	12	11	20	21	34	35
<i>Liver/Intrahepatic Bile Duct</i>	<i>Digestive System</i>	126	85	85	106	178	173	316	312
<i>Gallbladder</i>	<i>Digestive System</i>	25	19	21	23	36	35	46	45
<i>Other Biliary</i>	<i>Digestive System</i>	17	14	15	16	20	19	40	39
<i>Melanoma</i>	<i>Skin</i>	76	59	76	72	139	140	197	198
<i>Female Breast Cancer</i>	<i>Breast</i>	189	112	184	164	316	303	439	424
<i>Male Breast Cancer</i>	<i>Breast</i>	1	0	1	0	0	1	1	2
<i>Endometrium</i>	<i>Female Genital</i>	56	41	54	49	95	95	131	132
<i>Bladder</i>	<i>Urinary System</i>	147	97	142	135	260	243	321	305
<i>Kidney and Renal Pelvis</i>	<i>Urinary System</i>	120	85	120	99	168	202	242	272
<i>Glioma</i>	<i>Brain</i>	164	109	159	124	193	216	262	281
<i>Thyroid</i>	<i>Endocrine System</i>	11	7	11	11	23	23	31	30
<i>Hodgkin's Lymphoma</i>	<i>Lymphoids</i>	4	3	3	4	8	9	13	15
<i>Multiple Myeloma</i>	<i>Lymphoids</i>	182	141	178	160	278	258	332	310
<i>Non-Hodgkin's Lymphoma</i>	<i>Lymphoids</i>	272	171	268	239	446	439	579	569
<i>Chronic Lymphocytic Leukemia</i>	<i>Lymphoids</i>	51	23	47	44	70	71	101	101
<i>Acute Myeloid Leukemia</i>	<i>Lymphoids</i>	98	75	98	86	156	149	284	271
<i>Other Leukemia</i>	<i>Lymphoids</i>	57	39	56	50	97	92	209	195

Serum/Plasma availability based on subjects with prediagnostic specimen, baseline questionnaire, and biochemical consent. Subjects with rare cancer are excluded from having biochemical specimen in non-rare sites.

Serum and Plasma are considered available if there are 2+ parent vials that did not undergo an uncontrolled thaw in a study year, or if .1+ mL of material from aliquots are available.

Exception to the above: Plasma is considered available in T4 if the sole parent vial collected did not undergo an uncontrolled thaw, or if 1.8+ mL of plasma from aliquots are available.

DNA availability is based on subjects with genetic consent and DNA Source, Extracted DNA or Pending DNA from either arm.

*Cancer diagnosis is not considered for these figures. Cancer is listed as the cause of death and no additional checks are done.

Table 1.3: Specimen and Questionnaire Availability for Confirmed Cancers, Including Tumor Registry Data (Incidence to 2016/2017)

		DQX (Pre-DX)	DQX (Pre-DX)	DHQ (Pre-DX)	DQX (Pre-DX)	DQX or DHQ (Pre-DX)	DQX or DHQ (Pre-DX)	DQX and DHQ (Pre-DX)	DQX and DHQ (Pre-DX)	SQX (Pre-DX)	SQX (Pre-DX)	SQX (Any)	SQX (Any)
		Serum	DNA	Serum	DNA	Serum	DNA	Serum	DNA	Serum	DNA	Serum	DNA
<i>Cancer Type</i>	<i>Cancer/Adenoma Category</i>	.	.	.	.	.	.	.	.	.	.	.	.
<i>Prostate</i>	<i>PLCO</i>	4159	4204	2722	5090	4357	6724	2524	2570	1288	2477	3430	6262
<i>Lung</i>	<i>PLCO</i>	1831	1683	1415	2113	1951	2502	1295	1294	818	1421	1051	1745
<i>Colon</i>	<i>PLCO</i>	976	958	667	1360	1028	1682	615	636	374	724	726	1451
<i>Ovary (Including Extra)</i>	<i>PLCO</i>	274	257	200	352	286	428	188	181	123	221	187	331
<i>Ovary LMP</i>	<i>PLCO</i>	16	17	4	13	17	27	3	3	2	8	14	23
<i>Oral Cavity/Tonsil/Pharynx</i>	<i>Head and Neck</i>	253	240	205	325	270	378	188	187	132	223	193	328
<i>Larynx</i>	<i>Head and Neck</i>	115	104	78	116	122	152	71	68	49	71	90	132
<i>Pancreas</i>	<i>Digestive System</i>	452	393	368	615	480	689	340	319	222	409	249	446
<i>Esophagus</i>	<i>Digestive System</i>	162	143	133	186	169	211	126	118	75	114	93	139
<i>Stomach</i>	<i>Digestive System</i>	213	192	178	261	225	295	166	158	106	162	144	221
<i>Small Intestine</i>	<i>Digestive System</i>	73	68	62	110	75	122	60	56	31	63	54	103
<i>Liver/Intrahepatic Bile Duct</i>	<i>Digestive System</i>	148	129	121	203	160	227	109	105	82	139	86	149
<i>Gallbladder</i>	<i>Digestive System</i>	36	34	30	50	39	57	27	27	19	33	22	35
<i>Other Biliary</i>	<i>Digestive System</i>	72	60	61	86	78	97	55	49	37	51	40	60
<i>Melanoma</i>	<i>Skin</i>	1100	1127	907	1724	1150	1975	857	876	569	1132	962	1852
<i>Female Breast (Invasive)</i>	<i>Breast</i>	1788	1797	1415	2641	1913	3133	1290	1305	804	1504	1588	3049
<i>Female Breast (In Situ)</i>	<i>Breast</i>	486	477	382	668	518	798	350	347	210	367	459	816
<i>Male Breast</i>	<i>Breast</i>	24	21	22	30	27	33	19	18	11	21	21	31
<i>Endometrium</i>	<i>Female Genital</i>	355	353	239	509	372	641	222	221	133	290	312	625
<i>Bladder</i>	<i>Urinary System</i>	922	936	760	1462	970	1669	712	729	482	925	763	1462
<i>Kidney and Renal Pelvis</i>	<i>Urinary System</i>	461	447	380	624	482	704	359	367	225	414	357	617
<i>Glioma</i>	<i>Brain</i>	183	147	144	231	196	256	131	122	88	156	99	169
<i>Thyroid</i>	<i>Endocrine System</i>	142	154	129	258	158	294	113	118	84	166	130	270
<i>Hodgkin's Lymphoma</i>	<i>Lymphoids</i>	30	29	23	41	30	48	23	22	12	24	19	39
<i>Multiple Myeloma</i>	<i>Lymphoids</i>	277	257	243	403	294	441	226	219	134	240	184	311
<i>Non-Hodgkin's Lymphoma</i>	<i>Lymphoids</i>	789	794	648	1237	825	1393	612	638	404	790	637	1206
<i>Chronic Lymphocytic Leukemia</i>	<i>Lymphoids</i>	286	280	225	422	300	485	211	217	131	240	230	436
<i>Acute Myeloid Leukemia</i>	<i>Lymphoids</i>	151	143	130	229	156	244	125	128	94	159	99	172
<i>Other Leukemia</i>	<i>Lymphoids</i>	356	344	327	583	378	623	305	304	232	420	294	527
<i>Prevalent Adenoma: All</i>	<i>Adenoma</i>	3124	3244	12	14	3136	3258	0	0	0	0	3073	3264
<i>Prevalent Adenoma: Adv.</i>	<i>Adenoma</i>	1211	1254	3	4	1214	1258	0	0	0	0	1202	1271
<i>Incident Adenoma: All</i>	<i>Adenoma</i>	1105	1119	876	902	1168	1184	813	837	6	9	968	995
<i>Incident Adenoma: Adv.</i>	<i>Adenoma</i>	263	270	215	222	279	287	199	205	4	6	234	245
<i>Recurrent Adenoma: All</i>	<i>Adenoma</i>	818	820	521	532	845	850	494	502	5	5	758	762
<i>Recurrent Adenoma: Adv.</i>	<i>Adenoma</i>	212	213	116	117	216	219	112	111	1	1	193	195
<i>Recurrent Control</i>	<i>Adenoma</i>	838	844	706	727	865	874	679	697	0	0	771	784

Serum Availability: Subject has valid BQ, biochemical consent, no rare cancer if site is not rare, and 2+ parent vials that did not undergo an uncontrolled thaw or .1+ mL of material from aliquots in a study year.

DNA Source Availability: Subject has genetic consent and either 1+ vial of buffy coat, 7+ vials of whole blood, 10+ ug of dna, pending DNA, or 2+ vials of buccal cell.

Table 1.4: Genetic Specimen Availability by Randomization Group, Including Tumor Registry Data (Incidence to 2016/2017)

		Intervention Arm	Intervention Arm	Intervention Arm	Intervention Arm	Intervention Arm	Intervention Arm	Control Arm	Control Arm	Control Arm	Control Arm	Control Arm	Overall	Overall	Overall	Overall
		Buccal Cell	Buffy Coat	Whole Blood	Extracted DNA	DNA Pending Extraction	Any	Buccal Cell (pre-dx)	Buccal Cell	Extracted DNA	DNA Pending Extraction	Any	Source Material	Extracted DNA	DNA Pending Extraction	Any
Cancer Type	Cancer/Adenoma Category	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Prostate	PLCO	1359	4080	3734	4340	100	4689	2002	3151	2598	76	3355	7505	6938	176	8044
Lung	PLCO	154	1555	1498	1736	59	1908	442	587	506	27	852	2245	2242	86	2760
Colon	PLCO	221	892	865	966	35	1075	249	465	681	139	905	1442	1647	174	1980
Ovary (Including Extra)	PLCO	29	239	225	255	0	283	111	147	183	5	199	390	438	5	482
Ovary LMP	PLCO	4	18	16	16	0	18	9	11	11	1	12	30	27	1	30
Oral Cavity/Tonsil/Pharynx	Head and Neck	63	254	224	196	2	276	80	140	120	13	170	403	316	15	446
Larynx	Head and Neck	26	106	92	90	0	117	16	51	40	7	61	159	130	7	178
Pancreas	Digestive System	10	306	340	388	2	441	90	92	104	218	312	457	492	220	753
Esophagus	Digestive System	14	142	126	122	1	157	37	56	49	0	77	200	171	1	234
Stomach	Digestive System	18	189	171	199	1	219	61	78	75	3	109	268	274	4	328
Small Intestine	Digestive System	16	68	62	49	0	74	45	55	19	5	59	126	68	5	133
Liver/Intrahepatic Bile Duct	Digestive System	11	134	122	114	1	153	91	99	41	2	109	240	155	3	262
Gallbladder	Digestive System	3	38	32	22	0	40	18	21	8	0	24	59	30	0	64
Other Biliary	Digestive System	2	61	56	50	0	70	28	34	11	3	35	96	61	3	105
Melanoma	Skin	491	1085	1004	951	34	1259	718	980	659	238	968	2167	1610	272	2227
Female Breast (Invasive)	Breast	683	1656	1680	1782	1292	2058	1044	1610	1389	47	1659	3520	3171	1339	3717
Female Breast (In Situ)	Breast	218	463	447	479	3	542	246	403	343	7	405	909	822	10	947
Male Breast	Breast	7	25	23	19	0	25	8	11	6	0	11	36	25	0	36
Endometrium	Female Genital	110	343	325	358	19	404	244	366	318	7	369	740	676	26	773
Bladder	Urinary System	254	895	835	898	15	1029	545	688	641	20	862	1640	1539	35	1891
Kidney and Renal Pelvis	Urinary System	122	431	433	423	88	497	198	255	158	13	301	727	581	101	798
Glioma	Brain	5	147	130	127	0	162	96	98	73	1	102	249	200	1	264
Thyroid	Endocrine System	76	165	141	124	9	178	115	157	90	4	157	332	214	13	335
Hodgkin's Lymphoma	Lymphoids	2	25	26	27	1	29	19	25	25	1	28	52	52	2	57
Multiple Myeloma	Lymphoids	43	248	233	255	8	279	145	170	156	22	205	426	411	30	484
Non-Hodgkin's Lymphoma	Lymphoids	167	750	702	752	28	872	538	678	587	21	715	1461	1339	49	1587
Chronic Lymphocytic Leukemia	Lymphoids	83	257	240	272	15	302	154	221	207	22	247	489	479	37	549
Acute Myeloid Leukemia	Lymphoids	2	134	128	132	6	156	100	106	104	5	117	243	236	11	273
Other Leukemia	Lymphoids	57	337	308	294	11	381	263	289	198	6	302	641	492	17	683
Prevalent Adenoma: All	Adenoma	1206	3853	3681	3962	168	4299	0	0	0	0	0	4067	3962	168	4299
Prevalent Adenoma: Adv.	Adenoma	454	1496	1448	1659	73	1690	0	0	0	0	0	1609	1659	73	1690
Incident Adenoma: All	Adenoma	413	1137	1090	1113	260	1240	0	0	0	0	0	1197	1113	260	1240
Incident Adenoma: Adv.	Adenoma	96	266	258	288	91	297	0	0	0	0	0	282	288	91	297
Recurrent Adenoma: All	Adenoma	259	772	726	858	28	893	0	0	0	0	0	828	858	28	893
Recurrent Adenoma: Adv.	Adenoma	59	197	189	217	6	225	0	0	0	0	0	207	217	6	225
Recurrent Control	Adenoma	285	805	779	876	35	901	0	0	0	0	0	854	876	35	901

Genetic Specimen Availability based on valid baseline questionnaire and genetic consent.

Table 1.5: Prediagnostic Biochemical Specimen Availability, Including Tumor Registry Data (Incidence to 2016/2017)

		Serum	Serum	Serum	Serum	Serum	Serum, Zinc - Free*	EDTA Plasma	EDTA Plasma	EDTA Plasma	Heparin Plasma	Heparin Plasma	Heparin Plasma	RBC	RBC	RBC	RBC
		Any	T0	2+ Years Avail	3+ Years Avail	4+ Years Avail	T0	Any	2+ Years Avail	3+ Years Avail	Any	T0	2+ Years Avail	Any	T0	2+ Years Avail	3+ Years Avail
Prostate	PLCO	4587	4334	3742	3036	1669	4129	2817	2172	1498	4460	4248	2204	4776	4584	2858	1792
Lung	PLCO	2077	1930	1785	1510	933	1877	1412	1057	739	1657	1362	918	2142	2038	1409	917
Colon	PLCO	1081	1002	825	725	434	968	670	504	346	1054	980	495	1153	1091	675	415
Ovary (Including Extra)	PLCO	301	278	231	116	65	271	203	162	119	298	278	164	301	284	193	126
Ovary LMP	PLCO	19	16	9	4	1	16	3	2	0	17	16	3	17	16	3	1
Oral Cavity/Tonsil/Pharynx	Head and Neck	286	265	261	226	164	254	223	176	108	280	258	166	284	267	211	139
Larynx	Head and Neck	129	121	112	94	59	116	80	63	39	124	116	61	127	121	79	47
Pancreas	Digestive System	504	454	464	397	238	437	363	251	159	483	444	261	491	451	345	212
Esophagus	Digestive System	177	167	163	153	100	164	131	110	70	174	164	103	176	166	126	87
Stomach	Digestive System	241	217	222	192	122	215	176	134	96	232	214	122	239	219	163	106
Small Intestine	Digestive System	79	72	73	66	42	71	60	43	35	75	73	46	77	75	58	39
Liver/Intrahepatic Bile Duct	Digestive System	172	155	159	136	83	146	127	98	68	125	39	23	171	157	119	77
Gallbladder	Digestive System	42	40	39	35	23	38	34	26	18	33	21	18	41	39	30	23
Other Biliary	Digestive System	84	79	77	69	41	75	57	44	30	72	49	27	82	80	56	39
Melanoma	Skin	1177	1118	1074	958	625	1092	895	705	500	1157	1096	711	1233	1173	911	606
Female Breast (Invasive)	Breast	2011	1824	1791	1530	1019	1773	1436	1142	815	1938	1793	1109	2052	1897	1387	904
Female Breast (In Situ)	Breast	541	501	487	412	274	491	367	299	214	519	488	291	536	507	359	235
Male Breast	Breast	28	27	25	22	16	26	22	20	15	28	27	19	28	27	22	18
Endometrium	Female Genital	402	365	332	274	175	358	257	196	139	391	357	188	408	385	251	154
Bladder	Urinary System	1004	926	926	825	512	901	753	572	397	971	891	552	1010	906	748	450
Kidney and Renal Pelvis	Urinary System	506	477	465	424	284	472	379	318	218	495	470	308	536	513	397	285
Glioma	Brain	203	189	175	144	103	183	141	118	79	197	185	107	200	187	135	87
Thyroid	Endocrine System	164	150	150	137	103	149	131	115	84	161	148	104	179	163	140	92
Hodgkin's Lymphoma	Lymphoids	30	29	29	25	16	29	21	16	12	29	29	18	30	30	21	13
Multiple Myeloma	Lymphoids	304	283	272	220	133	275	240	196	134	297	282	196	300	284	232	157
Non-Hodgkin's Lymphoma	Lymphoids	858	799	793	690	441	766	632	486	361	840	780	451	909	854	651	414
Chronic Lymphocytic Leukemia	Lymphoids	310	281	283	237	149	276	208	166	111	295	275	156	310	293	205	134
Acute Myeloid Leukemia	Lymphoids	167	157	155	143	99	153	129	105	73	163	151	98	170	161	130	89
Other Leukemia	Lymphoids	389	364	370	342	217	355	311	239	171	380	354	232	401	371	313	201
Prevalent Adenoma: All	Adenoma	4162	4162	0	0	0	4039	0	0	0	4023	4023	0	4423	4423	0	0
Prevalent Adenoma: Adv.	Adenoma	1631	1631	0	0	0	1585	0	0	0	1596	1596	0	1746	1746	0	0
Incident Adenoma: All	Adenoma	1212	1169	1180	1147	877	1143	1054	935	745	1187	1120	899	1270	1226	1091	894
Incident Adenoma: Adv.	Adenoma	286	280	280	271	215	274	255	225	182	284	267	219	299	291	263	214
Recurrent Adenoma: All	Adenoma	882	858	821	659	336	833	546	368	236	864	831	463	930	911	567	286
Recurrent Adenoma: Adv.	Adenoma	222	218	207	160	85	214	133	88	60	216	210	116	234	231	140	69
Recurrent Control	Adenoma	890	859	850	761	485	839	731	535	347	877	838	616	935	908	757	421

Specimen availability based on valid BQ, biochemical consent, no rare cancer if site is not rare, and prediagnostic availability. *EEMS guidelines reserve Zinc-free vial unless given special permission. Serum/Plasma are available if there are 2+ parent vials that did not undergo an uncontrolled thaw in a study year, or if .1+ mL of material from aliquots are available. (T4 Plasma being the exception as before).

Table 1.6: Closest Prediagnostic Biochemical Specimen Availability by Cancer Type for Confirmed Cancers, Including Tumor Registry Data (Incidence to 2016/2017)

		Serum	Serum	Serum	Serum	Serum	Serum	EDTA Plasma	EDTA Plasma	EDTA Plasma	EDTA Plasma	EDTA Plasma	EDTA Plasma	Heparin Plasma	Heparin Plasma
		< 1 Year	< 2 Years	< 3 Years	< 4 Years	< 5 Years	Any	< 1 Year	< 2 Years	< 3 Years	< 4 Years	< 5 Years	Any	< 1 Year	< 2 Years
<i>Prostate</i>	<i>PLCO</i>	1509	1988	2259	2528	2801	4587	641	886	1117	1356	1594	2817	789	1338
<i>Lung</i>	<i>PLCO</i>	399	626	756	887	1022	2077	188	312	410	522	635	1412	122	213
<i>Colon</i>	<i>PLCO</i>	337	424	479	525	586	1081	133	189	234	267	315	670	233	310
<i>Ovary (Including Extra)</i>	<i>PLCO</i>	60	91	121	139	155	301	36	53	66	81	95	203	44	79
<i>Ovary LMP</i>	<i>PLCO</i>	13	14	15	15	15	19	.	.	.	.	.	3	8	13
<i>Oral Cavity/Tonsil/Pharynx</i>	<i>Head and Neck</i>	53	81	94	112	126	286	26	47	58	75	84	223	19	47
<i>Larynx</i>	<i>Head and Neck</i>	37	45	55	60	71	129	12	20	23	28	37	80	15	32
<i>Pancreas</i>	<i>Digestive System</i>	76	115	141	169	206	504	30	62	89	116	146	363	29	74
<i>Esophagus</i>	<i>Digestive System</i>	28	40	56	65	87	177	15	27	40	50	67	131	9	18
<i>Stomach</i>	<i>Digestive System</i>	34	58	79	94	112	241	20	34	52	66	78	176	14	29
<i>Small Intestine</i>	<i>Digestive System</i>	17	27	32	38	44	79	11	18	22	26	30	60	5	13
<i>Liver/Intrahepatic Bile Duct</i>	<i>Digestive System</i>	26	46	57	65	77	172	15	26	31	38	52	127	10	15
<i>Gallbladder</i>	<i>Digestive System</i>	5	11	15	17	21	42	3	7	12	13	18	34	1	3
<i>Other Biliary</i>	<i>Digestive System</i>	15	17	22	28	36	84	8	11	13	16	21	57	6	11
<i>Melanoma</i>	<i>Skin</i>	199	294	370	447	506	1177	132	191	244	308	362	895	95	183
<i>Female Breast (Invasive)</i>	<i>Breast</i>	486	720	856	1004	1144	2011	283	413	504	621	727	1436	212	431
<i>Female Breast (In Situ)</i>	<i>Breast</i>	135	212	255	288	315	541	74	105	134	160	184	367	54	114
<i>Male Breast</i>	<i>Breast</i>	4	7	7	8	9	28	2	5	6	7	8	22	2	4
<i>Endometrium</i>	<i>Female Genital</i>	133	191	214	229	253	402	58	79	100	112	137	257	75	120
<i>Bladder</i>	<i>Urinary System</i>	152	246	314	368	420	1004	102	155	208	256	296	753	64	135
<i>Kidney and Renal Pelvis</i>	<i>Urinary System</i>	78	133	162	203	242	506	44	80	105	142	175	379	35	74
<i>Glioma</i>	<i>Brain</i>	39	58	71	85	98	203	24	30	38	49	58	141	19	35
<i>Thyroid</i>	<i>Endocrine System</i>	26	43	55	66	72	164	14	22	32	44	50	131	13	20
<i>Hodgkin's Lymphoma</i>	<i>Lymphoids</i>	8	9	12	14	16	30	4	5	8	8	10	21	2	5
<i>Multiple Myeloma</i>	<i>Lymphoids</i>	45	75	90	116	136	304	35	56	68	91	107	240	23	46
<i>Non-Hodgkin's Lymphoma</i>	<i>Lymphoids</i>	143	234	289	339	389	858	81	143	186	232	272	632	63	130
<i>Chronic Lymphocytic Leukemia</i>	<i>Lymphoids</i>	65	92	121	144	164	310	30	52	71	90	102	208	20	53
<i>Acute Myeloid Leukemia</i>	<i>Lymphoids</i>	21	36	41	50	60	167	12	24	29	36	45	129	11	24
<i>Other Leukemia</i>	<i>Lymphoids</i>	38	57	71	95	113	389	32	46	63	82	103	311	20	39
<i>Prevalent Adenoma: All</i>	<i>Adenoma</i>	4162	4162	4162	4162	4162	4162	0	0	0	0	0	0	4023	4023
<i>Prevalent Adenoma: Adv.</i>	<i>Adenoma</i>	1631	1631	1631	1631	1631	1631	0	0	0	0	0	0	1596	1596
<i>Incident Adenoma: All</i>	<i>Adenoma</i>	910	1156	1164	1184	1192	1212	1008	1046	1052	1054	1054	1054	84	129
<i>Incident Adenoma: Adv.</i>	<i>Adenoma</i>	219	274	276	280	281	286	243	252	254	255	255	255	21	34
<i>Recurrent Adenoma: All</i>	<i>Adenoma</i>	383	625	712	780	822	882	360	441	475	523	544	546	142	332
<i>Recurrent Adenoma: Adv.</i>	<i>Adenoma</i>	102	162	180	200	209	222	86	106	112	129	133	133	39	90
<i>Recurrent Control</i>	<i>Adenoma</i>	235	450	584	687	755	890	312	443	558	656	707	731	105	225

Serum and Plasma are considered available if there are 2+ parent vials that did not undergo an uncontrolled thaw in a study year, or if .1+ mL of material from aliquots are available. Exception to the above: Plasma is considered available in T4 if the sole parent vial collected did not undergo an uncontrolled thaw, or if 1.8+ mL of plasma from aliquots are available.

Subjects with a rare cancer are excluded from having serum/plasma in non-rare sites.

Table 1.6: Closest Prediagnostic Biochemical Specimen Availability by Cancer Type for Confirmed Cancers, Including Tumor Registry Data (Incidence to 2016/2017)

		Heparin Plasma	Heparin Plasma	Heparin Plasma	Heparin Plasma	RBC	RBC	RBC	RBC	RBC	RBC	Whole Blood	Whole Blood	Whole Blood	Whole Blood	Whole Blood	Whole Blood
		< 3 Years	< 4 Years	< 5 Years	Any	< 1 Year	< 2 Years	< 3 Years	< 4 Years	< 5 Years	Any	< 1 Year	< 2 Years	< 3 Years	< 4 Years	< 5 Years	Any
<i>Prostate</i>	<i>PLCO</i>	1870	2191	2448	4460	1096	1853	2418	2781	3094	4776	304	543	767	999	1209	2789
<i>Lung</i>	<i>PLCO</i>	304	420	513	1657	298	563	780	931	1068	2142	86	154	236	354	445	1357
<i>Colon</i>	<i>PLCO</i>	413	462	519	1054	328	438	519	571	638	1153	45	91	175	211	251	668
<i>Ovary (Including Extra)</i>	<i>PLCO</i>	101	118	130	298	52	98	122	140	156	301	19	31	44	54	64	191
<i>Ovary LMP</i>	<i>PLCO</i>	13	13	13	17	8	12	12	12	13	17	.	1	1	1	1	4
<i>Oral Cavity/Tonsil/Pharynx</i>	<i>Head and Neck</i>	64	83	97	280	28	72	89	110	122	284	7	22	32	48	59	205
<i>Larynx</i>	<i>Head and Neck</i>	42	51	61	124	20	40	51	58	72	127	3	14	17	23	28	74
<i>Pancreas</i>	<i>Digestive System</i>	115	138	158	483	41	102	147	176	207	491	12	35	55	77	91	332
<i>Esophagus</i>	<i>Digestive System</i>	35	47	61	174	19	35	50	62	88	176	2	6	21	32	38	124
<i>Stomach</i>	<i>Digestive System</i>	45	65	84	232	22	48	74	95	111	239	7	15	23	39	53	163
<i>Small Intestine</i>	<i>Digestive System</i>	23	27	31	75	10	24	32	36	40	77	4	7	14	18	20	55
<i>Liver/Intrahepatic Bile Duct</i>	<i>Digestive System</i>	20	28	36	125	22	41	56	63	79	171	9	14	20	27	35	118
<i>Gallbladder</i>	<i>Digestive System</i>	7	10	14	33	2	7	16	17	21	41	1	2	5	8	12	30
<i>Other Biliary</i>	<i>Digestive System</i>	14	15	19	72	12	19	21	25	30	82	2	5	8	10	13	53
<i>Melanoma</i>	<i>Skin</i>	270	327	400	1157	151	291	389	466	548	1233	51	107	162	209	264	895
<i>Female Breast (Invasive)</i>	<i>Breast</i>	640	776	888	1938	314	633	848	1013	1153	2052	123	231	338	448	530	1393
<i>Female Breast (In Situ)</i>	<i>Breast</i>	172	212	249	519	81	171	231	275	310	536	37	59	87	114	140	358
<i>Male Breast</i>	<i>Breast</i>	6	9	10	28	3	7	8	10	11	28	.	2	4	6	6	20
<i>Endometrium</i>	<i>Female Genital</i>	156	182	205	391	96	163	210	230	255	408	29	42	62	80	103	249
<i>Bladder</i>	<i>Urinary System</i>	231	289	339	971	100	204	311	366	420	1010	43	84	133	183	228	743
<i>Kidney and Renal Pelvis</i>	<i>Urinary System</i>	111	150	175	495	55	123	169	212	255	536	21	42	61	95	121	394
<i>Glioma</i>	<i>Brain</i>	48	58	71	197	30	51	63	77	94	200	6	14	23	29	36	128
<i>Thyroid</i>	<i>Endocrine System</i>	32	39	51	161	20	36	58	72	79	179	5	9	17	23	36	127
<i>Hodgkin's Lymphoma</i>	<i>Lymphoids</i>	9	11	12	29	4	8	12	14	16	30	1	4	6	6	8	20
<i>Multiple Myeloma</i>	<i>Lymphoids</i>	70	89	103	297	33	70	96	121	140	300	13	29	44	60	68	223
<i>Non-Hodgkin's Lymphoma</i>	<i>Lymphoids</i>	199	256	309	840	100	212	295	359	411	909	33	71	109	156	200	640
<i>Chronic Lymphocytic Leukemia</i>	<i>Lymphoids</i>	80	100	121	295	31	82	116	140	158	310	10	26	41	60	74	204
<i>Acute Myeloid Leukemia</i>	<i>Lymphoids</i>	37	44	51	163	16	35	50	57	66	170	7	16	22	28	35	126
<i>Other Leukemia</i>	<i>Lymphoids</i>	62	70	88	380	31	59	83	103	127	401	12	26	43	52	69	303
<i>Prevalent Adenoma: All</i>	<i>Adenoma</i>	4023	4023	4023	4023	4423	4423	4423	4423	4423	4423	.	.	.	.	.	0
<i>Prevalent Adenoma: Adv.</i>	<i>Adenoma</i>	1596	1596	1596	1596	1746	1746	1746	1746	1746	1746	.	.	.	.	.	0
<i>Incident Adenoma: All</i>	<i>Adenoma</i>	960	1112	1121	1187	1071	1078	1108	1258	1260	1270	83	130	1007	1024	1024	1024
<i>Incident Adenoma: Adv.</i>	<i>Adenoma</i>	235	268	269	284	255	256	268	298	299	299	20	32	240	245	245	245
<i>Recurrent Adenoma: All</i>	<i>Adenoma</i>	543	663	731	864	337	581	679	802	859	930	136	234	398	455	490	547
<i>Recurrent Adenoma: Adv.</i>	<i>Adenoma</i>	142	168	184	216	83	147	175	209	219	234	36	63	95	109	120	134
<i>Recurrent Control</i>	<i>Adenoma</i>	375	521	643	877	253	473	620	746	816	935	105	221	357	495	609	741

Serum and Plasma are considered available if there are 2+ parent vials that did not undergo an uncontrolled thaw in a study year, or if .1+ mL of material from aliquots are available. Exception to the above: Plasma is considered available in T4 if the sole parent vial collected did not undergo an uncontrolled thaw, or if 1.8+ mL of plasma from aliquots are available.

Subjects with a rare cancer are excluded from having serum/plasma in non-rare sites.

Table 1.7: Furthest Prediagnostic Biochemical Specimen Availability by Cancer Type for Confirmed Cancers, Including Tumor Registry Data (Incidence to 2016/2017)

		Serum	Serum	Serum	Serum	Serum	EDTA Plasma	EDTA Plasma	EDTA Plasma	EDTA Plasma	EDTA Plasma	Heparin Plasma	Heparin Plasma	Heparin Plasma	Heparin Plasma	Heparin Plasma	RBC	RBC	RBC	RBC	RBC	Whole Blood	Whole Blood	Whole Blood	Whole Blood	Whole Blood
		> 4 Years	> 3 Years	> 2 Years	> 1 Year	Any	> 4 Years	> 3 Years	> 2 Years	> 1 Year	Any	> 4 Years	> 3 Years	> 2 Years	> 1 Year	Any	> 4 Years	> 3 Years	> 2 Years	> 1 Year	Any	> 4 Years	> 3 Years	> 2 Years	> 1 Year	Any
Prostate	PLCO	2059	2328	2599	3078	4587	1461	1700	1931	2176	2817	2269	2590	3122	3671	4460	1995	2358	2923	3680	4776	1790	2022	2246	2485	2789
Lung	PLCO	1190	1321	1451	1678	2077	890	1002	1100	1224	1412	1237	1353	1444	1535	1657	1211	1362	1579	1844	2142	1003	1121	1203	1271	1357
Colon	PLCO	556	602	657	744	1081	403	436	481	537	670	592	641	744	821	1054	582	634	715	825	1153	457	493	577	623	668
Ovary (Including Extra)	PLCO	162	180	210	241	301	122	137	150	167	203	180	197	219	254	298	161	179	203	249	301	137	147	160	172	191
Ovary LMP	PLCO	4	4	5	6	19	3	3	3	3	3	4	4	4	9	17	5	5	5	9	17	3	3	3	4	4
Oral Cavity/Tonsil/Pharynx	Head and Neck	174	192	205	233	286	148	165	176	197	223	197	216	233	261	280	174	195	212	256	284	157	173	183	198	205
Larynx	Head and Neck	69	74	84	92	129	52	57	60	68	80	73	82	92	109	124	69	76	87	107	127	51	57	60	71	74
Pancreas	Digestive System	335	363	389	428	504	247	274	301	333	363	345	368	409	454	483	315	344	389	450	491	255	277	297	320	332
Esophagus	Digestive System	112	121	137	149	177	81	91	104	116	131	127	139	156	165	174	114	126	141	157	176	92	103	118	122	124
Stomach	Digestive System	147	162	183	207	241	110	124	142	156	176	167	187	203	218	232	144	165	191	217	239	124	140	148	156	163
Small Intestine	Digestive System	41	47	52	62	79	34	38	42	49	60	48	52	62	70	75	41	45	53	67	77	37	41	48	51	55
Liver/Intrahepatic Bile Duct	Digestive System	107	115	126	146	172	89	96	101	112	127	97	105	110	115	125	108	115	130	149	171	91	98	104	109	118
Gallbladder	Digestive System	25	27	31	37	42	21	22	27	31	34	23	26	30	32	33	24	25	34	39	41	22	25	28	29	30
Other Biliary	Digestive System	56	62	67	69	84	41	44	46	49	57	57	58	61	66	72	57	61	63	70	82	43	45	48	51	53
Melanoma	Skin	730	807	883	978	1177	587	651	704	763	895	830	887	974	1062	1157	767	844	942	1082	1233	686	733	788	844	895
Female Breast (Invasive)	Breast	1007	1155	1291	1525	2011	815	932	1023	1153	1436	1162	1298	1507	1726	1938	1039	1204	1419	1738	2052	945	1055	1162	1270	1393
Female Breast (In Situ)	Breast	253	286	329	406	541	207	233	262	293	367	307	347	405	465	519	261	305	365	455	536	244	271	299	321	358
Male Breast	Breast	20	21	21	24	28	15	16	17	20	22	19	22	24	26	28	18	20	21	25	28	14	16	18	20	20
Endometrium	Female Genital	173	188	211	269	402	145	157	178	199	257	209	235	271	316	391	178	198	245	312	408	169	187	207	220	249
Bladder	Urinary System	636	690	758	852	1004	497	545	598	651	753	682	740	836	907	971	644	699	806	910	1010	560	610	659	700	743
Kidney and Renal Pelvis	Urinary System	303	344	373	428	506	237	274	299	335	379	345	384	421	460	495	324	367	413	481	536	299	333	352	373	394
Glioma	Brain	118	132	145	164	203	92	103	111	117	141	139	149	162	178	197	123	137	149	170	200	99	105	114	122	128
Thyroid	Endocrine System	98	109	121	138	164	87	99	109	117	131	122	129	141	148	161	107	121	143	159	179	104	110	118	122	127
Hodgkin's Lymphoma	Lymphoids	16	18	21	22	30	13	13	16	17	21	18	20	24	27	29	16	18	22	26	30	14	14	16	19	20
Multiple Myeloma	Lymphoids	188	214	229	259	304	149	172	184	205	240	208	227	251	274	297	179	204	230	267	300	163	179	194	210	223
Non-Hodgkin's Lymphoma	Lymphoids	519	569	624	715	858	400	446	489	551	632	584	641	710	777	840	550	614	697	809	909	484	531	569	607	640
Chronic Lymphocytic Leukemia	Lymphoids	166	189	218	245	310	118	137	156	178	208	195	215	242	275	295	170	194	228	279	310	144	163	178	194	204
Acute Myeloid Leukemia	Lymphoids	117	126	131	146	167	93	100	105	117	129	119	126	139	152	163	113	120	135	154	170	98	104	110	119	126
Other Leukemia	Lymphoids	294	318	332	351	389	229	248	265	279	311	310	318	341	360	380	298	318	342	370	401	251	260	277	291	303
Prevalent Adenoma: All	Adenoma	0	0	0	0	4162	0	0	0	0	0	0	0	0	0	4023	.	.	.	.	4423	.	.	.	.	0
Prevalent Adenoma: Adv.	Adenoma	0	0	0	0	1631	0	0	0	0	0	0	0	0	0	1596	.	.	.	.	1746	.	.	.	.	0
Incident Adenoma: All	Adenoma	28	48	56	302	1212	0	2	8	46	1054	75	227	1058	1103	1187	12	162	192	199	1270	.	17	894	941	1024
Incident Adenoma: Adv.	Adenoma	6	10	12	67	286	0	1	3	12	255	16	49	250	263	284	1	31	43	44	299	.	5	213	225	245
Recurrent Adenoma: All	Adenoma	102	170	257	499	882	23	71	105	186	546	201	321	532	722	864	128	251	349	593	930	92	149	313	411	547
Recurrent Adenoma: Adv.	Adenoma	22	42	60	120	222	4	21	27	47	133	48	74	126	177	216	25	59	87	151	234	25	39	71	98	134
Recurrent Control	Adenoma	203	306	440	655	890	75	173	288	419	731	356	502	652	772	877	189	315	462	682	935	246	384	520	636	741

Serum and Plasma are considered available if there are 2+ parent vials that did not undergo an uncontrolled thaw in a study year, or if .1+ mL of material from aliquots are available. Exception to the above: Plasma is considered available in T4 if the sole parent vial collected did not undergo an uncontrolled thaw, or if 1.8+ mL of plasma from aliquots are available.

Subjects with a rare cancer are excluded from having serum/plasma in non-rare sites.

Table 1.8: Specimen Availability by Race, Gender and Smoking History for Confirmed Cancers, Including Tumor Registry Data (Incidence to 2016/2017)

Cancer Type	Cancer/Adenoma Category	Race	Race	Race	Race	Race	Race	Race	Race	Gender	Gender	Gender	Gender	Smoking History	Smoking History	Smoking History	Smoking History	Smoking History	Smoking History
		White	White	Black	Black	Hispanic	Hispanic	Other	Other	Female	Female	Male	Male	Former	Former	Never	Never	Current	Current
		Serum	DNA	Serum	DNA	Serum	DNA	Serum	DNA	Serum	DNA	Serum	DNA	Serum	DNA	Serum	DNA	Serum	DNA
Prostate	PLCO	4118	7251	253	398	77	137	139	258	.	.	4587	8044	2250	3987	1929	3376	408	681
Lung	PLCO	1847	2463	133	156	31	41	66	100	821	1122	1256	1638	1059	1437	194	271	824	1052
Colon	PLCO	954	1769	69	104	14	22	44	85	481	875	600	1105	496	920	465	844	120	216
Ovary (Including Extra)	PLCO	276	449	12	13	7	10	6	10	301	482	.	.	111	168	166	274	24	40
Ovary LMP	PLCO	18	29	.	.	.	.	1	1	19	30	.	.	6	10	9	14	4	6
Oral Cavity/Tonsil/Pharynx	Head and Neck	266	408	7	11	5	10	8	17	81	136	205	310	130	211	87	132	69	103
Larynx	Head and Neck	114	161	10	11	3	3	2	3	11	13	118	165	65	92	13	20	51	66
Pancreas	Digestive System	445	667	18	28	10	15	31	43	215	342	289	411	214	300	208	339	82	114
Esophagus	Digestive System	166	218	4	5	2	5	5	6	18	22	159	212	119	163	32	44	26	27
Stomach	Digestive System	191	262	18	23	6	8	26	35	56	89	185	239	115	165	83	116	43	47
Small Intestine	Digestive System	69	123	7	6	3	4	.	.	24	48	55	85	36	60	31	61	12	12
Liver/Intrahepatic Bile Duct	Digestive System	142	217	8	14	12	13	10	18	43	74	129	188	89	130	53	88	30	44
Gallbladder	Digestive System	38	56	2	4	1	1	1	3	24	40	18	24	17	29	21	32	4	3
Other Biliary	Digestive System	73	92	3	2	2	2	6	9	31	37	53	68	37	52	35	36	12	17
Melanoma	Skin	1166	2204	1	4	2	8	8	11	388	751	789	1476	525	996	579	1104	73	127
Female Breast (Invasive)	Breast	1849	3446	67	99	23	48	72	124	2011	3717	.	.	744	1385	1106	2047	161	285
Female Breast (In Situ)	Breast	488	866	29	37	5	9	19	35	541	947	.	.	199	357	299	515	43	75
Male Breast	Breast	24	31	2	3	1	.	1	2	.	.	28	36	13	18	14	17	1	1
Endometrium	Female Genital	371	715	14	21	.	7	17	30	402	773	.	.	133	267	248	466	21	40
Bladder	Urinary System	948	1791	16	33	11	23	29	44	189	356	815	1535	577	1106	272	495	155	290
Kidney and Renal Pelvis	Urinary System	456	720	28	33	6	13	16	32	167	264	339	534	239	366	212	344	55	88
Glioma	Brain	194	254	3	3	1	2	5	5	78	107	125	157	104	129	85	118	14	17
Thyroid	Endocrine System	147	305	7	11	3	6	7	13	108	221	56	114	52	133	100	179	12	23
Hodgkin's Lymphoma	Lymphoids	29	55	.	.	.	.	1	2	12	23	18	34	15	23	11	26	4	8
Multiple Myeloma	Lymphoids	274	430	17	33	5	9	8	12	106	188	198	296	135	227	155	237	14	20
Non-Hodgkin's Lymphoma	Lymphoids	801	1488	15	32	10	16	32	51	347	658	511	929	354	705	427	744	77	138
Chronic Lymphocytic Leukemia	Lymphoids	293	522	8	13	3	4	6	10	110	198	200	351	134	254	149	250	27	45
Acute Myeloid Leukemia	Lymphoids	160	255	2	4	.	1	5	13	53	95	114	178	90	134	63	115	14	24
Other Leukemia	Lymphoids	356	638	7	10	5	7	21	28	130	240	259	443	204	342	152	278	33	63
Prevalent Adenoma: All	Adenoma	3817	3932	164	171	68	72	113	124	1500	1559	2662	2740	1950	2031	1572	1606	640	662
Prevalent Adenoma: Adv.	Adenoma	1508	1561	69	72	17	17	37	40	557	589	1074	1101	779	801	607	625	245	264
Incident Adenoma: All	Adenoma	1083	1108	53	53	15	16	61	63	415	424	797	816	555	564	527	538	130	138
Incident Adenoma: Adv.	Adenoma	256	266	14	15	2	2	14	14	93	95	193	202	135	139	117	123	34	35
Recurrent Adenoma: All	Adenoma	824	830	24	26	11	13	23	24	256	256	626	637	437	448	312	307	133	138
Recurrent Adenoma: Adv.	Adenoma	211	214	6	6	1	1	4	4	68	71	154	154	98	102	90	87	34	36
Recurrent Control	Adenoma	855	866	22	24	7	7	6	4	375	374	515	527	434	443	336	332	120	126

'Other' Race: Asians, Pacific Islanders, American Indians, Unknown. 'Other' Smoking: Unknown or Ambiguous. DNA Availability is based on Source DNA, extracted DNA and DNA Pending Extraction.

Serum Availability is based on prediagnostic availability - 2+ parent vials that did not undergo an uncontrolled thaw in a study year, or if .1+ mL of material from aliquots are available.

Table 1.9: Specimen and Questionnaire Availability for All Confirmed Cancers (SEER), Including Tumor Registry Data (Incidence to 2016/2017)

SEER Cancer Type	EDTA Plasma	Heparin Plasma	RBC	Serum (Pre-DX)	Serum (Pre-DX)	Serum (Pre-DX)	DNA Source	DNA Source	DNA Source	DNA Source	DNA Source	DNA Source	GWAS	DQX	DQX	DHQ	DHQ	DQX or DHQ	DQX or DHQ	DQX and DHQ	DQX and DHQ	SQX (Pre-DX)	SQX (Pre-DX)	SQX Any	SQX Any
	Pre-DX	Pre-DX	Pre-DX	T0	2+ Years	Any	Buffy	Blood	Buccal	DNA	Pending	Any	Total	Serum	DNA	Serum	DNA	Serum	DNA	Serum	DNA	Serum	DNA	Serum	DNA
Lip	20	24	25	24	23	25	20	20	24	31	3	45	43	22	21	19	36	23	39	18	18	14	22	21	39
Tongue	65	80	81	75	73	82	74	60	69	102	3	131	143	74	70	61	100	78	113	57	57	43	69	59	102
Salivary Gland	31	38	39	37	38	40	34	31	35	46	0	72	74	35	33	29	53	38	61	26	25	18	38	27	55
Floor of Mouth	10	16	16	15	15	16	15	13	5	15	4	25	25	16	15	9	15	16	21	9	9	5	12	7	16
Gum and Other Mouth	38	50	51	46	46	50	44	40	38	54	0	75	77	46	45	37	54	46	63	37	36	21	37	36	54
Nasopharynx	7	9	9	8	9	9	9	8	3	9	0	11	11	7	7	7	7	9	9	5	5	5	5	6	6
Tonsil	24	27	27	25	25	27	27	24	18	27	3	42	39	24	23	21	28	27	33	18	18	13	21	20	32
Oropharynx	9	10	10	10	9	11	9	9	4	11	0	14	12	9	8	6	9	9	11	6	6	3	5	5	7
Hypopharynx	14	18	18	17	16	18	15	13	4	15	1	22	20	15	13	10	16	17	20	8	9	5	8	7	11
Other Oral Cavity and Pharynx	5	8	8	8	7	8	7	6	3	6	1	9	10	5	5	6	7	7	8	4	4	5	6	5	6
Esophagus	131	174	176	167	163	177	142	126	70	171	1	234	264	162	143	133	186	169	211	126	118	75	114	93	139
Stomach	176	232	239	217	222	241	189	171	96	274	4	328	343	213	192	178	261	225	295	166	158	106	162	144	221
Small Intestine	60	75	77	72	73	79	68	62	71	68	5	133	130	73	68	62	110	75	122	60	56	31	63	54	103
Colon: Cecum	185	242	263	235	217	249	207	202	146	360	43	441	464	229	229	182	330	240	382	171	177	103	168	163	305
Colon: Appendix	20	26	30	25	23	28	25	22	18	33	1	42	41	24	24	17	30	25	37	16	17	11	21	21	32
Colon: Ascending Colon	150	199	214	186	182	204	167	161	128	277	36	348	379	187	177	152	260	200	295	139	142	84	154	139	268
Colon: Hepatic Flexure	51	75	75	70	66	76	57	55	37	111	6	132	138	68	62	54	102	72	118	50	46	32	56	50	93
Colon: Transverse Colon	52	82	92	77	70	85	63	64	60	130	11	161	162	80	79	58	129	82	145	56	63	34	84	56	127
Colon: Splenic Flexure	18	31	35	28	29	32	21	19	16	46	4	54	59	31	26	17	35	32	45	16	16	10	17	20	38
Colon: Descending Colon	25	39	42	36	30	39	36	33	28	63	4	73	75	35	34	24	52	37	63	22	23	9	22	23	53
Colon: Sigmoid Colon	66	163	181	157	81	165	139	139	112	272	36	332	373	139	140	65	184	146	265	58	59	34	89	115	249
Colon: Large Intestine, NOS	21	27	32	25	24	28	24	23	20	45	4	56	55	24	26	21	45	28	51	17	20	11	22	18	40
Rectosigmoid Junction	16	27	32	26	21	28	28	24	25	61	8	67	80	25	28	14	44	26	57	13	15	8	21	19	49
Rectum	82	162	181	156	100	167	145	141	114	274	22	310	331	150	151	77	176	157	255	70	72	49	91	120	227
Anus, Anal Canal, and Anorectum	18	29	31	28	26	31	28	23	39	33	2	61	61	29	29	17	41	30	53	16	17	9	25	19	46
Liver	98	96	135	121	126	135	101	93	88	116	2	201	198	115	98	93	156	125	174	83	80	62	107	65	116
Intrahepatic Bile Duct	29	29	36	34	33	37	33	29	22	39	1	61	63	33	31	28	47	35	53	26	25	20	32	21	33
Gallbladder	34	33	41	40	39	42	38	32	24	30	0	64	64	36	34	30	50	39	57	27	27	19	33	22	35
Other Biliary	57	72	82	79	77	84	61	56	36	61	3	105	102	72	60	61	86	78	97	55	49	37	51	40	60
Pancreas	363	483	521	454	464	504	333	363	126	520	220	798	733	452	417	368	653	480	730	340	340	222	439	249	482
Retroperitoneum	0	0	9	0	0	0	5	6	6	10	0	14	14	0	8	0	12	0	13	0	7	0	6	0	9
Peritoneum, Omentum and Mesentery	32	46	47	39	36	45	37	35	21	63	0	70	71	40	41	30	50	42	63	28	28	21	35	28	47
Other Digestive Organs	6	6	10	6	6	6	9	9	8	15	0	17	15	6	10	5	16	6	17	5	9	4	13	6	15
Nose, Nasal Cavity and Middle Ear	0	0	10	0	0	0	10	7	11	18	0	22	21	0	9	0	14	0	18	0	5	0	9	0	13
Larynx	80	124	127	121	112	129	106	92	77	130	7	178	179	115	104	78	116	122	152	71	68	49	71	90	132
Lung and Bronchus	1431	1692	2181	1963	1812	2113	1586	1527	768	2288	87	2821	3025	1864	1720	1432	2147	1985	2555	1311	1312	829	1444	1077	1792
Pleura	1	2	5	2	2	2	3	2	0	5	0	5	5	2	4	2	4	2	4	2	4	1	2	1	2
Trachea, Mediastinum and Other Resp Organs	1	1	1	1	1	1	1	1	4	2	0	5	4	1	1	0	3	1	4	0	0	0	3	0	4

Serum Availability: Subject has valid baseline questionnaire, biochemical consent, and 2+ parent vials that did not undergo an uncontrolled thaw or .1+ mL of material from aliquots in a study year.

Subjects with a rare cancer are excluded from having serum in non-rare sites.

DNA Source Availability: Subject has genetic consent and either 1+ vial of buffy coat, 7+ vials of whole blood, 10+ ug of dna, pending DNA, or 2+ vials of buccal cell

*Questionnaire Availability is based on availability prior to diagnosis

Table 1.9: Specimen and Questionnaire Availability for All Confirmed Cancers (SEER), Including Tumor Registry Data (Incidence to 2016/2017)

SEER Cancer Type	EDTA Plasma	Heparin Plasma	RBC	Serum (Pre-DX)	Serum (Pre-DX)	Serum (Pre-DX)	DNA Source	DNA Source	DNA Source	DNA Source	DNA Source	DNA Source	GWAS	DQX	DQX	DHQ	DHQ	DQX or DHQ	DQX or DHQ	DQX and DHQ	DQX and DHQ	SQX (Pre-DX)	SQX (Pre-DX)	SQX Any	SQX Any
	Pre-DX	Pre-DX	Pre-DX	T0	2+ Years	Any	Buffy	Blood	Buccal	DNA	Pending	Any	Total	Serum	DNA	Serum	DNA	Serum	DNA	Serum	DNA	Serum	DNA	Serum	DNA
Bones and Joints	10	16	17	14	15	16	12	11	15	13	0	26	26	14	11	13	21	16	22	11	10	7	14	10	20
Soft Tissue including Heart	71	103	108	95	93	104	89	79	94	112	5	167	164	95	88	71	131	101	156	65	63	50	96	80	141
Melanoma of the Skin	895	1157	1233	1118	1074	1177	1085	1004	1471	1610	272	2227	2209	1100	1127	907	1724	1150	1975	857	876	569	1132	962	1852
Other Non-Epithelial Skin	26	38	38	37	34	38	33	28	44	41	2	67	71	36	34	26	54	38	64	24	24	19	32	32	54
Breast	1825	2485	2616	2352	2303	2580	2144	2150	2932	4018	1349	4700	4669	2298	2295	1819	3339	2458	3964	1659	1670	1025	1892	2068	3896
Cervix Uteri	15	26	28	25	24	26	23	17	19	20	0	38	39	25	24	17	25	26	33	16	16	10	13	19	30
Corpus Uteri	241	374	391	351	318	385	328	310	461	655	24	748	761	342	341	225	492	357	623	210	210	124	279	300	607
Uterus, NOS	16	17	17	14	14	17	15	15	15	21	2	25	24	13	12	14	17	15	18	12	11	9	11	12	18
Ovary	160	246	248	232	186	251	202	191	150	369	6	404	386	226	213	157	285	237	356	146	142	96	174	160	280
Vagina	11	13	14	13	12	14	12	11	12	15	0	23	22	10	9	11	20	12	20	9	9	7	15	9	18
Vulva	22	28	31	27	28	29	29	23	44	35	2	65	59	22	23	21	49	26	55	17	17	16	39	22	50
Other Female Genital Organs	14	23	23	23	18	24	18	15	23	36	0	42	45	24	20	17	33	24	39	17	14	8	22	13	30
Prostate	2817	4460	4776	4334	3742	4587	4080	3734	4510	6938	176	8044	7810	4159	4204	2722	5090	4357	6724	2524	2570	1288	2477	3430	6262
Testis	4	5	6	5	5	5	5	5	4	8	0	10	9	5	6	3	6	5	9	3	3	3	5	4	8
Penis	17	21	24	21	19	21	21	20	12	25	0	34	34	19	22	15	26	20	31	14	17	10	12	16	26
Other Male Genital Organs	4	6	7	6	6	6	6	6	5	7	0	10	11	6	7	4	7	6	10	4	4	2	3	5	8
Urinary Bladder	753	971	1010	926	926	1004	895	835	942	1539	35	1891	1825	922	936	760	1462	970	1669	712	729	482	925	763	1462
Kidney and Renal Pelvis	379	495	536	477	465	506	431	433	377	581	101	798	879	461	447	380	624	482	704	359	367	225	414	357	617
Ureter	38	42	45	39	38	42	42	38	43	59	1	84	80	37	37	32	61	40	69	29	29	26	49	34	67
Other Urinary Organs	12	23	23	22	20	24	14	13	15	20	0	32	31	23	20	16	25	23	32	16	13	9	19	14	25
Eye and Orbit	25	30	36	30	30	32	30	28	30	37	3	58	56	31	34	27	41	32	48	26	27	14	26	22	43
Brain	132	186	189	179	164	192	136	121	88	183	1	240	264	173	137	136	211	185	233	124	115	84	140	92	150
Cranial Nerves Other Nervous System	9	11	11	10	11	11	11	9	15	17	0	24	23	10	10	8	20	11	23	7	7	4	16	7	19
Thyroid	131	161	179	150	150	164	165	141	233	214	13	335	336	142	154	129	258	158	294	113	118	84	166	130	270
Other Endocrine including Thymus	15	19	19	19	19	19	17	15	15	18	1	32	31	19	19	16	27	19	30	16	16	7	12	14	22
Hodgkin-Nodal	21	29	30	29	29	30	25	26	26	50	2	55	52	30	29	23	39	30	46	23	22	12	22	19	37
Hodgkin-Extranodal	0	0	0	0	0	0	0	0	1	2	0	2	2	0	0	0	2	0	2	0	0	0	2	0	2
NHL-Nodal	437	589	630	563	552	600	517	476	571	940	33	1101	1077	553	549	456	865	578	969	431	445	271	522	439	823
NHL-Extranodal	174	222	247	210	212	227	208	202	233	352	15	424	429	209	217	171	328	219	373	161	172	118	232	173	335
Myeloma	240	297	300	283	272	304	248	233	213	411	30	484	454	277	257	243	403	294	441	226	219	134	240	184	311
Acute Lymphocytic Leukemia	5	8	8	8	8	8	6	3	5	11	0	12	12	7	6	7	11	8	11	6	6	4	6	4	7
Chronic Lymphocytic Leukemia	208	295	310	281	283	310	257	240	304	479	37	549	546	286	280	225	422	300	485	211	217	131	240	230	436
Other Lymphocytic Leukemia	20	25	26	24	25	25	23	19	23	33	1	41	43	23	22	19	28	24	33	18	17	17	22	21	31
Acute Myeloid Leukemia	129	163	170	157	155	167	134	128	108	236	11	273	259	151	143	130	229	156	244	125	128	94	159	99	172
Chronic Myeloid Leukemia	44	68	70	65	64	69	51	43	54	95	3	116	109	66	63	51	92	67	104	50	51	35	67	45	86
Other Myeloid/Monocytic Leukemia	7	10	10	8	8	10	7	6	9	14	0	15	16	8	5	8	14	9	14	7	5	5	10	5	10
Acute Monocytic Leukemia	6	7	7	7	6	7	6	6	5	10	1	12	12	7	6	6	11	7	11	6	6	5	7	5	7
Other Acute Leukemia	13	15	16	15	14	16	12	12	6	20	0	21	16	14	12	11	17	16	20	9	9	4	10	5	11
Aleukemic, Subleukemic, and NOS	14	16	20	14	15	16	18	19	12	22	0	28	26	12	15	10	23	13	25	9	13	10	18	11	19

Serum Availability: Subject has valid baseline questionnaire, biochemical consent, and 2+ parent vials that did not undergo an uncontrolled thaw or .1+ mL of material from aliquots in a study year.

Subjects with a rare cancer are excluded from having serum in non-rare sites.

DNA Source Availability: Subject has genetic consent and either 1+ vial of buffy coat, 7+ vials of whole blood, 10+ ug of dna, pending DNA, or 2+ vials of buccal cell

*Questionnaire Availability is based on availability prior to diagnosis

Table 1.9: Specimen and Questionnaire Availability for All Confirmed Cancers (SEER), Including Tumor Registry Data (Incidence to 2016/2017)

SEER Cancer Type	EDTA Plasma	Heparin Plasma	RBC	Serum (Pre-DX)	Serum (Pre-DX)	Serum (Pre-DX)	DNA Source	DNA Source	DNA Source	DNA Source	DNA Source	DNA Source	GWAS	DQX	DQX	DHQ	DHQ	DQX or DHQ	DQX or DHQ	DQX and DHQ	DQX and DHQ	SQX (Pre-DX)	SQX (Pre-DX)	SQX Any	SQX Any
	Pre-DX	Pre-DX	Pre-DX	T0	2+ Years	Any	Buffy	Blood	Buccal	DNA	Pending	Any	Total	Serum	DNA	Serum	DNA	Serum	DNA	Serum	DNA	Serum	DNA	Serum	DNA
Kaposi Sarcoma	2	3	3	3	3	3	2	1	0	2	0	3	3	3	3	2	2	3	3	2	2	0	0	1	1
Miscellaneous	378	469	560	458	452	491	471	421	445	632	25	936	912	443	471	392	777	473	851	362	397	270	546	336	667

Serum Availability: Subject has valid baseline questionnaire, biochemical consent, and 2+ parent vials that did not undergo an uncontrolled thaw or .1+ mL of material from aliquots in a study year.

Subjects with a rare cancer are excluded from having serum in non-rare sites.

DNA Source Availability: Subject has genetic consent and either 1+ vial of buffy coat, 7+ vials of whole blood, 10+ ug of dna, pending DNA, or 2+ vials of buccal cell

*Questionnaire Availability is based on availability prior to diagnosis

Table 1.10: Specimen Availability By Gender, Race, Age, Year of Randomization, Center and Family History of Cancer (Incidence to 2016/2017)

	Intervention Arm	Intervention Arm			Intervention Arm	Control Arm	Control Arm	GWAS	GWAS	GWAS	GWAS	GWAS Cancer-free	GWAS Cancer-free	GWAS Cancer-free	GWAS Cancer-free
	All PLCO	Serum	EDTA Plasma	Heparin Plasma	DNA	All PLCO	DNA	I-Arm	I-Arm	C-Arm	C-Arm	I-Arm	I-Arm	C-Arm	C-Arm
	N	N	N	N	N	N	N	N	%	N	%	N	%	N	%
All	77443	65591	55738	63293	62913	77444	49893	62440	100.00	48119	100.00	43778	100.00	34092	100.00
Gender	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Female	39103	32469	28029	31326	31619	39106	26291	31320	50.16	25582	53.16	23751	54.25	19451	57.05
Male	38340	33122	27709	31967	31294	38338	23602	31120	49.84	22537	46.84	20027	45.75	14641	42.95
Race	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
White, Non-Hispanic	66872	58248	49435	56431	55883	65700	44474	55496	88.88	43028	89.42	38806	88.64	30463	89.36
Black, Non-Hispanic	3883	3225	2642	3063	3022	3825	1754	2997	4.80	1532	3.18	2054	4.69	1076	3.16
Hispanic	1421	1135	972	1086	1114	1397	778	1068	1.71	710	1.48	796	1.82	524	1.54
Asian	2791	1965	1785	1885	1911	2784	1289	1927	3.09	1345	2.80	1442	3.29	990	2.90
Pacific Islander	400	303	279	282	295	435	204	227	0.36	170	0.35	158	0.36	116	0.34
American Indian	205	165	145	153	163	184	98	157	0.25	95	0.20	121	0.28	74	0.22
Missing	1871	550	480	393	525	3119	1296	568	0.91	1239	2.57	401	0.92	849	2.49
Age At Randomization	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<= 59	25849	22543	21197	21850	22433	25838	17789	22187	35.53	17261	35.87	16504	37.70	13017	38.18
60-64	23783	20263	16920	19601	19453	23765	15297	19396	31.06	14778	30.71	13300	30.38	10291	30.19
65-69	17454	14454	11384	13889	13520	17469	10892	13422	21.50	10425	21.67	8920	20.38	6946	20.37
>= 70	10357	8331	6237	7953	7507	10372	5915	7435	11.91	5655	11.75	5054	11.54	3838	11.26
Fiscal Year Of Randomization	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1994	5690	3918	92	3555	2957	5714	2887	3195	5.12	2877	5.98	1990	4.55	1821	5.34
1995	12017	9856	7605	9527	8973	12015	6777	8926	14.30	6740	14.01	5654	12.92	4285	12.57
1996	13395	11085	10342	10760	10848	13396	7996	10728	17.18	7885	16.39	7268	16.60	5339	15.66
1997	13766	11577	10777	11197	11326	13740	8730	11222	17.97	8471	17.60	7905	18.06	6083	17.84
1998	10684	9394	8702	9023	9305	10670	6930	9138	14.63	6699	13.92	6600	15.08	4878	14.31
1999	11931	10574	9777	10266	10506	11950	8712	10345	16.57	8259	17.16	7656	17.49	6176	18.12
2000	8087	7504	6923	7324	7339	8092	6474	7239	11.59	5931	12.33	5456	12.46	4536	13.31
2001	1873	1683	1520	1641	1659	1867	1387	1647	2.64	1257	2.61	1249	2.85	974	2.86
Study Center	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
University of Colorado	6583	5731	4810	5474	5497	6581	4577	5396	8.64	4425	9.20	3808	8.70	3135	9.20
Georgetown University	4053	3383	2678	3257	3190	4052	2396	3180	5.09	2415	5.02	2048	4.68	1578	4.63
Pacific Health Research and Education In Henry Ford Health System	5422	2031	1863	1913	2538	5420	1437	2529	4.05	1900	3.95	1846	4.22	1351	3.96
University of Minnesota	12336	9336	7569	8823	8892	12326	6847	8791	14.08	6539	13.59	6171	14.10	4711	13.82
Washington University in St Louis	14427	13305	11258	12893	12481	14433	11127	12431	19.91	10619	22.07	8328	19.02	7266	21.31
University of Pittsburgh	7517	6543	5509	6211	5926	7524	4900	5955	9.54	4687	9.74	4316	9.86	3406	9.99
University of Utah	8466	8079	6847	7874	7664	8464	5448	7604	12.18	5159	10.72	5318	12.15	3645	10.69
Marshfield Clinic Research Foundation	7178	6614	5825	6410	6400	7185	4678	6319	10.12	4500	9.35	4628	10.57	3370	9.89
University of Alabama at Birmingham	8367	7543	6618	7439	7336	8365	6196	7289	11.67	5818	12.09	5157	11.78	4122	12.09
Has Family History of Any Cancer?	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
No Form	1833	521	454	366	497	3085	1276	542	0.87	1221	2.54	380	0.87	833	2.44
Not Answered	199	141	105	133	132	317	166	129	0.21	169	0.35	94	0.21	125	0.37
No	33393	28480	24349	27528	27328	32740	21093	27090	43.39	20229	42.04	19278	44.04	14568	42.73

Table 1.10: Specimen Availability By Gender, Race, Age, Year of Randomization, Center and Family History of Cancer (Incidence to 2016/2017)

	Intervention Arm	Intervention Arm			Intervention Arm	Control Arm	Control Arm	GWAS	GWAS	GWAS	GWAS	GWAS Cancer-free	GWAS Cancer-free	GWAS Cancer-free	GWAS Cancer-free
	All PLCO	Serum	EDTA Plasma	Heparin Plasma	DNA	All PLCO	DNA	I-Arm	I-Arm	C-Arm	C-Arm	I-Arm	I-Arm	C-Arm	C-Arm
	N	N	N	N	N	N	N	N	%	N	%	N	%	N	%
Yes	42018	36449	30830	35266	34956	41302	27358	34679	55.54	26500	55.07	24026	54.88	18566	54.46
Did the Participant Return the BQ?	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
No	1833	521	454	366	497	3085	1276	542	0.87	1221	2.54	380	0.87	833	2.44
Yes	75610	65070	55284	62927	62416	74359	48617	61898	99.13	46898	97.46	43398	99.13	33259	97.56
Has Valid SQX	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
No Valid SQX	24509	17679	12691	16619	15533	26376	9989	15387	24.64	9541	19.83	10228	23.36	6397	18.76
Completed Valid SQX	52934	47912	43047	46674	47380	51068	39904	47053	75.36	38578	80.17	33550	76.64	27695	81.24
Completed Valid DQX?	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
No: Control Arm	0	0	0	0	0	77444	49893	0	0.00	48119	100.00	0	0.00	34092	100.00
No	15984	8016	6774	6984	8142	0	0	8167	13.08	0	0.00	5823	13.30	0	0.00
Yes	61459	57575	48964	56309	54771	0	0	54273	86.92	0	0.00	37955	86.70	0	0.00
Completed Valid DHQ?	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
No	19579	11192	7125	10250	9967	21861	7420	10084	16.15	7474	15.53	6972	15.93	5336	15.65
Yes	57864	54399	48613	53043	52946	55583	42473	52356	83.85	40645	84.47	36806	84.07	28756	84.35
Has Confirmed Cancer	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
No	57151	48137	41466	46650	46552	57445	37980	46368	74.26	35998	74.81	43778	100.00	34092	100.00
Yes	20292	17454	14272	16643	16361	19999	11913	16072	25.74	12121	25.19	0	0.00	0	0.00
Cigarette Smoking Status	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Ambiguous	1	1	1	0	1	1	0	1	0.00	0	0.00	0	0.00	0	0.00
No Form	1833	521	454	366	497	3085	1276	542	0.87	1221	2.54	380	0.87	833	2.44
Not Answered	17	12	11	11	11	14	11	11	0.02	10	0.02	8	0.02	8	0.02
Never Smoked Cigarettes	34993	30435	26359	29608	29479	34275	23288	29322	46.96	22639	47.05	21594	49.33	16837	49.39
Current Cigarette Smoker	8075	6659	5416	6295	6214	7978	4183	6073	9.73	3938	8.18	3708	8.47	2444	7.17
Former Cigarette Smoker	32524	27963	23497	27013	26711	32091	21135	26491	42.43	20311	42.21	18088	41.32	13970	40.98