

Table E3. Chi-Square analysis to compare sex, laterality to diagnosis**Patient demographics by diagnosis (N=2603)**

Conjunctivitis/Keratitis/Infection					
	No	%	Yes	%	P-value
Age at admission					<0.001
18 - 34	365	21.7%	289	31.3%	
35 - 54	523	31.1%	310	33.6%	
55 - 65	287	17.1%	136	14.7%	
65+	505	30.1%	188	20.4%	
Gender					0.094
Female	1032	61.4%	536	58.1%	
Male	648	38.6%	387	41.9%	
Institutions					<0.001
Utah	1306	77.7%	555	60.1%	
Zurich	374	22.3%	368	39.9%	
Department					<0.001
Neurology	193	11.5%	3	0.3%	
Ophthalmology	1487	88.5%	920	99.7%	
Unilateral					0.003
No	680	40.5%	318	34.5%	
Yes	998	59.5%	603	65.5%	
Dry Eye/Blepharitis					
	No	%	Yes	%	P-value
Age at admission					<0.001
18 - 34	597	27.9%	57	12.3%	
35 - 54	732	34.2%	101	21.7%	

55 - 65	335	15.7%	88	18.9%	
65+	474	22.2%	219	47.1%	
Gender					<0.001
Female	1254	58.7%	314	67.5%	
Male	884	41.4%	151	32.5%	
Institutions					0.015
Utah	1507	70.5%	354	76.1%	
Zurich	631	29.5%	111	23.9%	
Department					<0.001
Neurology	190	8.9%	6	1.3%	
Ophthalmology	1948	91.1%	459	98.7%	
Unilateral					<0.001
No	660	30.9%	338	72.8%	
Yes	1475	69.1%	126	27.2%	
Headache/Migraine					
	No	%	Yes	%	P-value
Age at admission					<0.001
18 - 34	619	25.5%	35	20.5%	
35 - 54	753	31.0%	80	46.8%	
55 - 65	396	16.3%	27	15.8%	
65+	664	27.3%	29	17.0%	
Gender					0.004
Female	1447	59.5%	121	70.8%	
Male	985	40.5%	50	29.2%	
Institutions					<0.001
Utah	1696	69.7%	165	96.5%	

Zurich	736	30.3%	6	3.5%	
Department					<0.001
Neurology	96	4.0%	100	58.5%	
Ophthalmology	2336	96.1%	71	41.5%	
Unilateral					0.129
No	923	38.0%	75	43.9%	
Yes	1505	62.0%	96	56.1%	
Uveitis					
	No	%	Yes	%	P-value
Age at admission					0.022
18 - 34	615	25.1%	39	26.0%	
35 - 54	771	31.4%	62	41.3%	
55 - 65	400	16.3%	23	15.3%	
65+	667	27.2%	26	17.3%	
Gender					0.816
Female	1479	60.3%	89	59.3%	
Male	974	39.7%	61	40.7%	
Institutions					0.329
Utah	1759	71.7%	102	68.0%	
Zurich	694	28.3%	48	32.0%	
Department					<0.001
Neurology	196	8.0%	0	0.0%	
Ophthalmology	2257	92.0%	150	100.0%	
Unilateral					<0.001
No	976	39.9%	22	14.7%	
Yes	1473	60.2%	128	85.3%	

Cataract or Other Anterior Segment Surgery					
	No	%	Yes	%	P-value
Age at admission					0.006
18 - 34	636	25.3%	18	20.9%	
35 - 54	812	32.3%	21	24.4%	
55 - 65	413	16.4%	10	11.6%	
65+	656	26.1%	37	43.0%	
Gender					0.049
Female	1525	60.6%	43	50.0%	
Male	992	39.4%	43	50.0%	
Institutions					<0.001
Utah	1776	70.6%	85	98.8%	
Zurich	741	29.4%	1	1.2%	
Department					0.023
Neurology	195	7.8%	1	1.2%	
Ophthalmology	2322	92.3%	85	98.8%	
Unilateral					0.495
No	968	38.5%	30	34.9%	
Yes	1545	61.5%	56	65.1%	
Hordeolum/Chalazion					
	No	%	Yes	%	P-value
Age at admission					0.022
18 - 34	623	24.7%	31	36.9%	
35 - 54	809	32.1%	24	28.6%	
55 - 65	407	16.2%	16	19.1%	
65+	680	27.0%	13	15.5%	

Gender					0.051
Female	1526	60.6%	42	50.0%	
Male	993	39.4%	42	50.0%	
Institutions					<0.001
Utah	1828	72.6%	33	39.3%	
Zurich	691	27.4%	51	60.7%	
Department					0.008
Neurology	196	7.8%	0	0.0%	
Ophthalmology	2323	92.2%	84	100.0%	
Unilateral					<0.001
No	997	39.6%	1	1.2%	
Yes	1518	60.4%	83	98.8%	

Optic Neuritis

	No	%	Yes	%	P-value
Age at admission					<0.001
18 - 34	621	24.5%	33	46.5%	
35 - 54	806	31.8%	27	38.0%	
55 - 65	412	16.3%	11	15.5%	
65+	693	27.4%	0	0.0%	
Gender					0.496
Female	1528	60.4%	40	56.3%	
Male	1004	39.7%	31	43.7%	
Institutions					0.125
Utah	1816	71.7%	45	63.4%	
Zurich	716	28.3%	26	36.6%	
Department					<0.001

Neurology	152	6.0%	44	62.0%	
Ophthalmology	2380	94.0%	27	38.0%	
Unilateral					0.002
No	983	38.9%	15	21.1%	
Yes	1545	61.1%	56	78.9%	

Ectropion/Entropion/Lid Disorder

	No	%	Yes	%	P-value
Age at admission					<0.001
18 - 34	647	25.5%	7	10.9%	
35 - 54	824	32.5%	9	14.1%	
55 - 65	417	16.4%	6	9.4%	
65+	651	25.6%	42	65.6%	
Gender					0.151
Female	1535	60.5%	33	51.6%	
Male	1004	39.5%	31	48.4%	
Institutions					0.002
Utah	1804	71.1%	57	89.1%	
Zurich	735	29.0%	7	10.9%	
Department					0.067
Neurology	195	7.7%	1	1.6%	
Ophthalmology	2344	92.3%	63	98.4%	
Unilateral					0.059
No	981	38.7%	17	27.0%	
Yes	1555	61.3%	46	73.0%	

Herpes Virus

	No	%	Yes	%	P-value
--	----	---	-----	---	---------

Age at admission					0.290
18 - 34	644	25.3%	10	17.0%	
35 - 54	816	32.1%	17	28.8%	
55 - 65	410	16.1%	13	22.0%	
65+	674	26.5%	19	32.2%	
Gender					0.136
Female	1538	60.5%	30	50.9%	
Male	1006	39.5%	29	49.2%	
Institutions					0.023
Utah	1811	71.2%	50	84.8%	
Zurich	733	28.8%	9	15.3%	
Department					0.086
Neurology	195	7.7%	1	1.7%	
Ophthalmology	2349	92.3%	58	98.3%	
Unilateral					<0.001
No	989	38.9%	9	15.3%	
Yes	1551	61.1%	50	84.8%	
Scleritis					
	No	%	Yes	%	P-value
Age at admission					0.005
18 - 34	635	24.9%	19	33.9%	
35 - 54	808	31.7%	25	44.6%	
55 - 65	415	16.3%	8	14.3%	
65+	689	27.1%	4	7.1%	
Gender					0.303
Female	1538	60.4%	30	53.6%	

Male	1009	39.6%	26	46.4%	
Institutions					0.132
Utah	1826	71.7%	35	62.5%	
Zurich	721	28.3%	21	37.5%	
Department					0.031
Neurology	196	7.7%	0	0.0%	
Ophthalmology	2351	92.3%	56	100.0%	
Unilateral					<0.001
No	992	39.0%	6	10.7%	
Yes	1551	61.0%	50	89.3%	
Glaucoma					
	No	%	Yes	%	P-value
Age at admission					0.015
18 - 34	650	25.4%	4	9.8%	
35 - 54	820	32.0%	13	31.7%	
55 - 65	418	16.3%	5	12.2%	
65+	674	26.3%	19	46.3%	
Gender					0.585
Female	1545	60.3%	23	56.1%	
Male	1017	39.7%	18	43.9%	
Institutions					0.420
Utah	1834	71.6%	27	65.9%	
Zurich	728	28.4%	14	34.2%	
Department					0.213
Neurology	195	7.6%	1	2.4%	
Ophthalmology	2367	92.4%	40	97.6%	

Unilateral					0.810
No	983	38.4%	15	36.6%	
Yes	1575	61.6%	26	63.4%	
Foreign Body					
	No	%	Yes	%	P-value
Age at admission					0.676
18 - 34	645	25.1%	9	26.5%	
35 - 54	820	31.9%	13	38.2%	
55 - 65	417	16.2%	6	17.7%	
65+	687	26.7%	6	17.7%	
Gender					<0.001
Female	1559	60.7%	9	26.5%	
Male	1010	39.3%	25	73.5%	
Institutions					<0.001
Utah	1827	71.1%	34	100.0%	
Zurich	742	28.9%	0	0.0%	
Department					0.094
Neurology	196	7.6%	0	0.0%	
Ophthalmology	2373	92.4%	34	100.0%	
Unilateral					0.004
No	993	38.7%	5	14.7%	
Yes	1572	61.3%	29	85.3%	
Retinal Disease					
	No	%	Yes	%	P-value
Age at admission					0.019
18 - 34	650	25.3%	4	12.9%	

35 - 54	826	32.1%	7	22.6%	
55 - 65	412	16.0%	11	35.5%	
65+	684	26.6%	9	29.0%	
Gender					0.537
Female	1551	60.3%	17	54.8%	
Male	1021	39.7%	14	45.2%	
Institutions					0.642
Utah	1840	71.5%	21	67.7%	
Zurich	732	28.5%	10	32.3%	
Department					0.110
Neurology	196	7.6%	0	0.0%	
Ophthalmology	2376	92.4%	31	100.0%	
Unilateral					0.068
No	991	38.6%	7	22.6%	
Yes	1577	61.4%	24	77.4%	
Keratopathy/Corneal Dystrophy					
	No	%	Yes	%	P-value
Age at admission					0.473
18 - 34	650	25.2%	4	14.8%	
35 - 54	821	31.9%	12	44.4%	
55 - 65	419	16.3%	4	14.8%	
65+	686	26.6%	7	25.9%	
Gender					0.037
Female	1557	60.4%	11	40.7%	
Male	1019	39.6%	16	59.3%	
Institutions					0.015

Utah	1836	71.3%	25	92.6%	
Zurich	740	28.7%	2	7.4%	
Department					0.136
Neurology	196	7.6%	0	0.0%	
Ophthalmology	2380	92.4%	27	100.0%	
Unilateral					0.003
No	995	38.7%	3	11.1%	
Yes	1577	61.3%	24	88.9%	
Contact Lens Wear					
	No	%	Yes	%	P-value
Age at admission					0.036
18 - 34	644	24.9%	10	50.0%	
35 - 54	827	32.0%	6	30.0%	
55 - 65	420	16.3%	3	15.0%	
65+	692	26.8%	1	5.0%	
Gender					0.662
Female	1555	60.2%	13	65.0%	
Male	1028	39.8%	7	35.0%	
Institutions					0.005
Utah	1841	71.3%	20	100.0%	
Zurich	742	28.7%	0	0.0%	
Department					0.200
Neurology	196	7.6%	0	0.0%	
Ophthalmology	2387	92.4%	20	100.0%	
Unilateral					0.542
No	989	38.4%	9	45.0%	

Yes	1590	61.7%	11	55.0%	
Idiopathic Intracranial Hypertension					
	No	%	Yes	%	P-value
Age at admission					0.001
18 - 34	642	24.9%	12	63.2%	
35 - 54	827	32.0%	6	31.6%	
55 - 65	422	16.3%	1	5.3%	
65+	693	26.8%	0	0.0%	
Gender					0.002
Female	1550	60.0%	18	94.7%	
Male	1034	40.0%	1	5.3%	
Institutions					0.081
Utah	1844	71.4%	17	89.5%	
Zurich	740	28.6%	2	10.5%	
Department					0.619
Neurology	194	7.5%	2	10.5%	
Ophthalmology	2390	92.5%	17	89.5%	
Unilateral					0.002
No	984	38.1%	14	73.7%	
Yes	1596	61.9%	5	26.3%	
Ischemic/Thrombotic events					
	No	%	Yes	%	P-value
Age at admission					0.173
18 - 34	652	25.2%	2	11.1%	
35 - 54	823	31.8%	10	55.6%	
55 - 65	421	16.3%	2	11.1%	

65+	689	26.7%	4	22.2%	
Gender					0.674
Female	1558	60.3%	10	55.6%	
Male	1027	39.7%	8	44.4%	
Institutions					0.945
Utah	1848	71.5%	13	72.2%	
Zurich	737	28.5%	5	27.8%	
Department					0.018
Neurology	192	7.4%	4	22.2%	
Ophthalmology	2393	92.6%	14	77.8%	
Unilateral					0.017
No	996	38.6%	2	11.1%	
Yes	1585	61.4%	16	88.9%	

Ocular/Periocular Injury

	No	%	Yes	%	P-value
Age at admission					0.682
18 - 34	651	25.2%	3	20.0%	
35 - 54	826	31.9%	7	46.7%	
55 - 65	421	16.3%	2	13.3%	
65+	690	26.7%	3	20.0%	
Gender					0.985
Female	1559	60.2%	9	60.0%	
Male	1029	39.8%	6	40.0%	
Institutions					0.060
Utah	1847	71.4%	14	93.3%	
Zurich	741	28.6%	1	6.7%	

Department					0.268
Neurology	196	7.6%	0	0.0%	
Ophthalmology	2392	92.4%	15	100.0%	
Unilateral					0.045
No	996	38.5%	2	13.3%	
Yes	1588	61.5%	13	86.7%	
Cellulitis					
	No	%	Yes	%	P-value
Age at admission					0.777
18 - 34	652	25.2%	2	15.4%	
35 - 54	828	32.0%	5	38.5%	
55 - 65	420	16.2%	3	23.1%	
65+	690	26.6%	3	23.1%	
Gender					0.108
Female	1563	60.4%	5	38.5%	
Male	1027	39.7%	8	61.5%	
Institutions					0.008
Utah	1856	71.7%	5	38.5%	
Zurich	734	28.3%	8	61.5%	
Department					0.302
Neurology	196	7.6%	0	0.0%	
Ophthalmology	2394	92.4%	13	100.0%	
Unilateral					0.004
No	998	38.6%	0	0.0%	
Yes	1588	61.4%	13	100.0%	
Trigeminal/Cranial Nerve Disorder					

	No	%	Yes	%	P-value
Age at admission					0.129
18 - 34	652	25.2%	2	15.4%	
35 - 54	831	32.1%	2	15.4%	
55 - 65	418	16.1%	5	38.5%	
65+	689	26.6%	4	30.8%	
Gender					0.507
Female	1559	60.2%	9	69.2%	
Male	1031	39.8%	4	30.8%	
Institutions					0.664
Utah	1851	71.5%	10	76.9%	
Zurich	739	28.5%	3	23.1%	
Department					<0.001
Neurology	188	7.3%	8	61.5%	
Ophthalmology	2402	92.7%	5	38.5%	
Unilateral					0.255
No	995	38.5%	3	23.1%	
Yes	1591	61.5%	10	76.9%	

Orbital Myositis

	No	%	Yes	%	P-value
Age at admission					0.030
18 - 34	647	25.0%	7	58.3%	
35 - 54	829	32.0%	4	33.3%	
55 - 65	422	16.3%	1	8.3%	
65+	693	26.8%	0	0.0%	
Gender					0.101

Female	1558	60.1%	10	83.3%	
Male	1033	39.9%	2	16.7%	
Institutions					0.098
Utah	1855	71.6%	6	50.0%	
Zurich	736	28.4%	6	50.0%	
Department					0.916
Neurology	195	7.5%	1	8.3%	
Ophthalmology	2396	92.5%	11	91.7%	
Unilateral					0.339
No	995	38.5%	3	25.0%	
Yes	1592	61.5%	9	75.0%	
Cranial Mass/Neoplasm					
	No	%	Yes	%	P-value
Age at admission					0.873
18 - 34	651	25.1%	3	30.0%	
35 - 54	829	32.0%	4	40.0%	
55 - 65	422	16.3%	1	10.0%	
65+	691	26.7%	2	20.0%	
Gender					0.527
Female	1561	60.2%	7	70.0%	
Male	1032	39.8%	3	30.0%	
Institutions					0.916
Utah	1854	71.5%	7	70.0%	
Zurich	739	28.5%	3	30.0%	
Department					0.767
Neurology	195	7.5%	1	10.0%	

Ophthalmology	2398	92.5%	9	90.0%	
Unilateral					0.231
No	996	38.5%	2	20.0%	
Yes	1593	61.5%	8	80.0%	
Unknown					
	No	%	Yes	%	P-value
Age at admission					0.098
18 - 34	622	25.3%	32	21.6%	
35 - 54	795	32.4%	38	25.7%	
55 - 65	394	16.1%	29	19.6%	
65+	644	26.2%	49	33.1%	
Gender					0.010
Female	1464	59.6%	104	70.3%	
Male	991	40.4%	44	29.7%	
Institutions					0.001
Utah	1737	70.8%	124	83.8%	
Zurich	718	29.3%	24	16.2%	
Department					0.714
Neurology	186	7.6%	10	6.8%	
Ophthalmology	2269	92.4%	138	93.2%	
Unilateral					0.034
No	929	37.9%	69	46.6%	
Yes	1522	62.1%	79	53.4%	
Others					
	No	%	Yes	%	P-value
Age at admission					0.037

18 - 34	632	25.0%	22	30.1%	
35 - 54	803	31.7%	30	41.1%	
55 - 65	411	16.3%	12	16.4%	
65+	684	27.0%	9	12.3%	
Gender					0.803
Female	1523	60.2%	45	61.6%	
Male	1007	39.8%	28	38.4%	
Institutions					0.206
Utah	1804	71.3%	57	78.1%	
Zurich	726	28.7%	16	21.9%	
Department		0.0%		0.0%	0.001
Neurology	183	7.2%	13	17.8%	
Ophthalmology	2347	92.8%	60	82.2%	
Unilateral					0.225
No	965	38.2%	33	45.2%	
Yes	1561	61.8%	40	54.8%	