test area

Table of contents

- test area
 - load
 - pls
 - bars histo
 - box
 - pie
 - join
 - sankey
 - tbl
 - print_summary()

 - descr_db()
 - show num
 - venn
 - venhlp

load



pls

bars

[z_first_treatment_after_days] by [z_kkr_label], n=1_687 (67_247)



[z_first_treatment_after_days] by [z_kkr_label], NULL excluded, n=1_687) ci(95) on medians

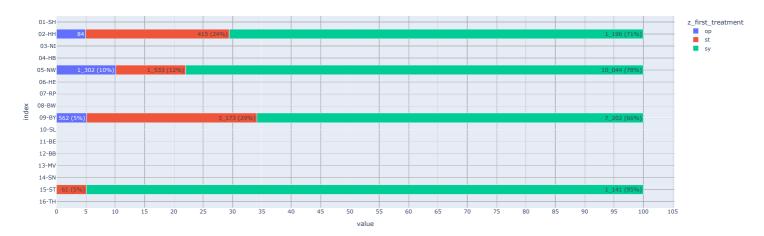
60 30 20-10-01-SH 02-HH 03-NI 04-HB 14-SN 15-ST 16-TH 05-NW 06-HE 13-MV 07-RP 09-BY 10-SL 11-BE 12-BB z_kkr_label

	z_kkr_label	z_first_treatment	z_first_treatment_after_days
0	02-HH	ор	0
1	05-NW	sy	54
2	09-BY	st	196
3	05-NW	ор	19
4	02-HH	ор	0
656	02-HH	ор	0

	z_kkr_label	z_first_treatment	z_first_treatment_after_days
657	05-NW	ор	0
658	15-ST	sy	37
659	09-BY	sy	71
660	09-BY	sy	46

661 rows × 3 columns

[z_kkr_label] by [z_first_treatment], n=48 (26_713)

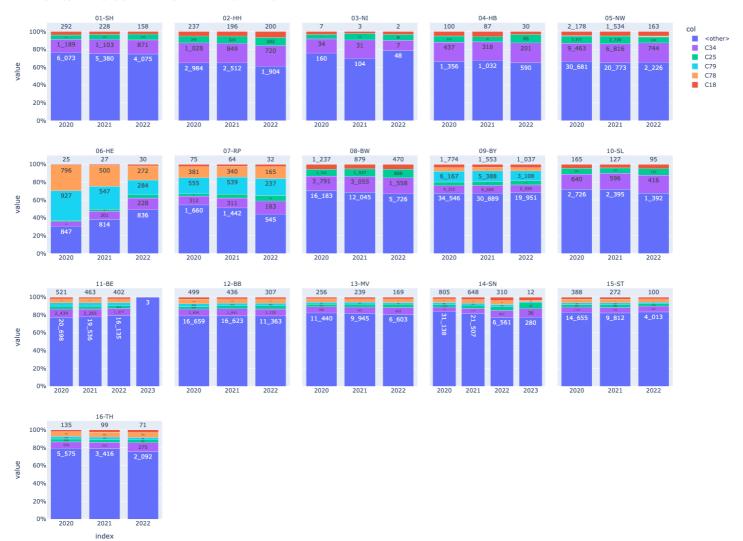


	z_dy	tu	z_kkr_label	cnt
0	2020	06	13-MV	1
1	2020	30	13-MV	1
2	2020	###	13-MV	21
3	2020	18	11-BE	1
4	2020	18.	13-MV	1
16352	2023	S37	14-SN	1
16353	2023	S72	11-BE	1
16354	2023	Z22	14-SN	1
16355	2023	Z85	14-SN	1
16356	2023	Z96	14-SN	1

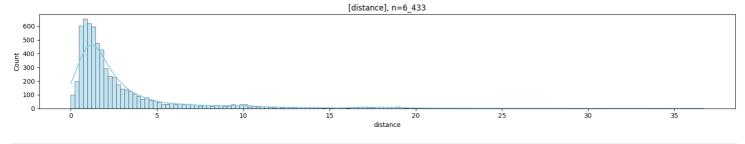
16357 rows × 4 columns

z_dy tu z_kkr_label cnt dtype: object	int64 object object int64					
---	------------------------------------	--	--	--	--	--

[z_dy] TOP 5 [tu] [z_kkr_label] , n=16_357 (600_156)



histo

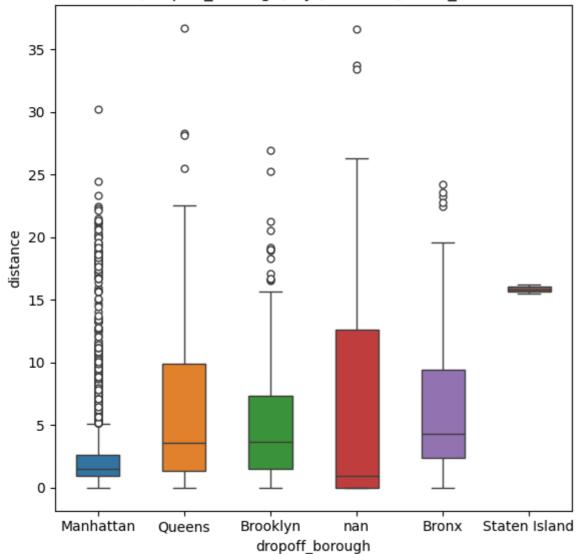


column	count		median			-			kurto
	6_433.000							•	•

box

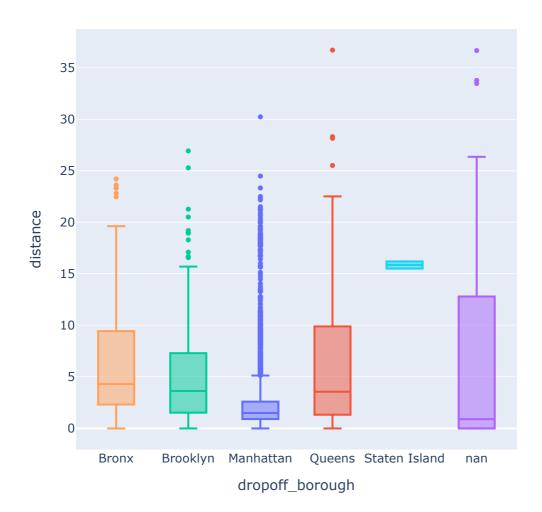
	dropoff_borough	distance
0	Manhattan	1.60
1	Manhattan	0.79
2	Manhattan	1.37
3	Manhattan	7.70
4	Manhattan	2.16
		. • • •
6428	Manhattan	0.75
6429		18.74
6430		4.14
6431		1.12
6432	Brooklyn	3.85
[643	3 rows x 2 column	ısl

[dropoff_borough] by [distance], $n=6_433$



column co	ount min	lower	q25	median	mean	q75	upper	max	std	cv	sum	skew	kurto	
distance 6_4	433.00 0.00	0.00	0.98	1.64	3.02	3.21	6.55	36.70	3.83	1.27	19_457.36	: :		
column	count	min	lower	q25	median	mean	q75	upper	max	sto	l cv l	sum	skew	kurto
Bronx Brooklyn Manhattan Queens Staten Island nan	137.00 501.00 5_206.00 542.00 2.00 45.00	0.00 0.00 0.00 0.00 15.51 0.00	0.00 0.00 0.00 0.00 15.51 0.00	2.36 1.53 0.91 1.34 15.68 0.00	4.31 3.63 1.50 3.56 15.86 0.90	6.61 5.03 2.39 5.96 15.86 7.17		19.62 15.70 5.13 22.51 16.20 26.35	26.92 30.23 36.70	1 4.4 6 2.9 1 5.8	01 1.21 19 0.99	905.8 2_519.2 12_447.6 3_230.1 31.7 322.6	28 1.42 8 3.74 3 1.29 1 -0.00	2.23 17.39 1.50 -2.00

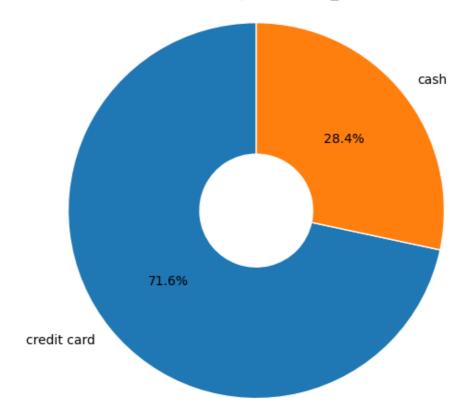
[dropoff_borough] by [distance], $n=6_433$



column c	ount min	lower	q25	median	mean	q75	upper	max	std	cv	sum	skew	kurto	
distance 6_	433.00 0.00	0.00	0.98	1.64	3.02	3.21	6.55	36.70	3.83	1.27 :	19_457.36	3.01	11.13	
column	count	min	lower	q25	median	mean	q75	upper	max	std	cv	sum	skew	kurto
Bronx Brooklyn Manhattan Queens	137.00 501.00 5_206.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	2.36 1.53 0.91 1.34	4.31 3.63 1.50 3.56	6.61 5.03 2.39 5.96	9.44 7.30 2.60 9.89	19.62 15.70 5.13 22.51	24.20 26.92 30.23	5.95 4.49 2.91 5.89	0.89	905.88 2_519.28 12_447.68 3 230.13	1.42	2.23
Staten Island			15.51 0.00	15.68	15.86	15.86 7.17	16.03	16.20	16.20	0.49	0.03	31.71 322.68	-0.00	-2.00 0.86

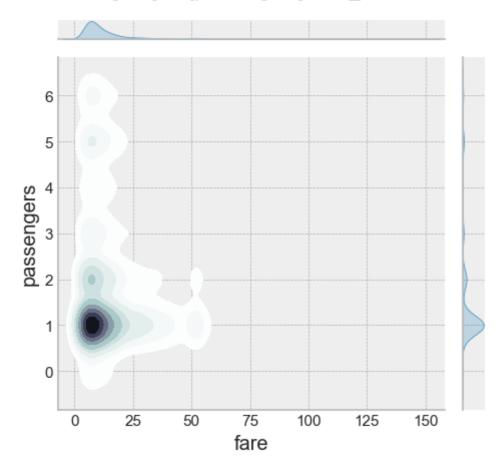
pie

#test lol, payment, n=6_433



join

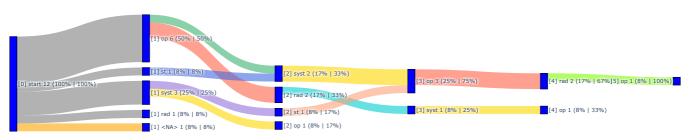
[fare] vs [passengers], n=6_433



sankey



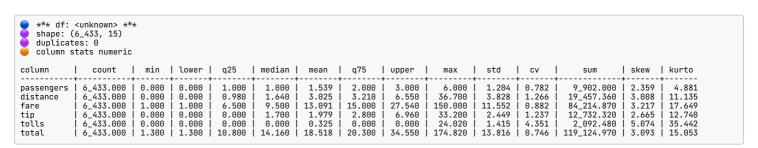
[tumor-id] over [treatment], n=12 id (26 events)



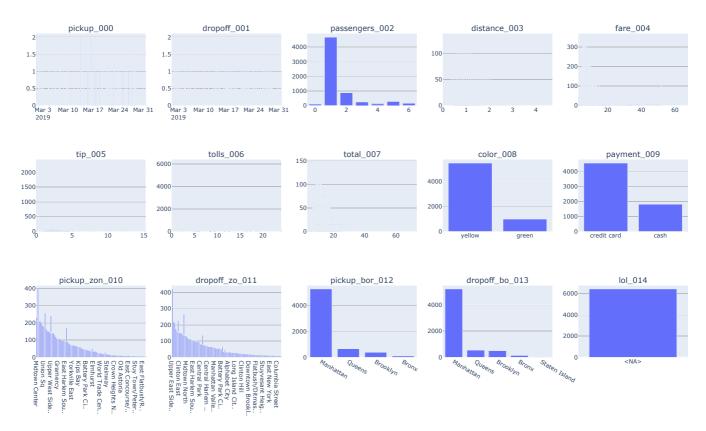
tbl print_summary()

column	count	min	lower	q25	median	mean	q75	upper	max	std	l cv	sum	skew	kurto
passengers	6_433.000	0.000	0.000	1.000			2.000	3.000	6.000		0.782			
distance	6_433.000	0.000	0.000	0.980	1.640	3.025	3.210	6.550	36.700		1.266	19_457.360	3.008	11.135
fare	6_433.000	1.000	1.000	6.500	9.500	13.091	15.000	27.540	150.000	11.552	0.882	84_214.870	3.217	17.649
tip	6_433.000	0.000	0.000	0.000	1.700	1.979	2.800	6.960	33.200	2.449	1.237	12_732.320		12.740
tolls	6_433.000	0.000	0.000	0.000	0.000	0.325	0.000	0.000	24.020		4.351	2_092.480	5.074	35.442
total	6_433.000	1.300	1.300	10.800	14.160	18.518	20.300	34.550	174.820	13.816	0.746	119_124.970	3.093	15.053

describe_df()



L	pie	ckup	dropoff	passengers	distance	fare	tip	tolls	total	color	payment	pickup_zone	dropoff_zone	pickup_borough	dropoff_borough	lol
			2019-03-23 20:27:24	1	1.60	7.0	2.15	0.0	12.95	yellow	credit card	Lenox Hill West	UN/Turtle Bay South	Manhattan	Manhattan	NaN
ŀ			2019-03-04 16:19:00	1	0.79	5.0	0.00	0.0	9.30	yellow	cash	Upper West Side South	Upper West Side South	Manhattan	Manhattan	NaN
	<i>,</i> ,		2019-03-27 18:00:25	1	1.37	7.5	2.36	0.0	14.16	yellow	credit card	Alphabet City	West Village	Manhattan	Manhattan	NaN



descr_db()

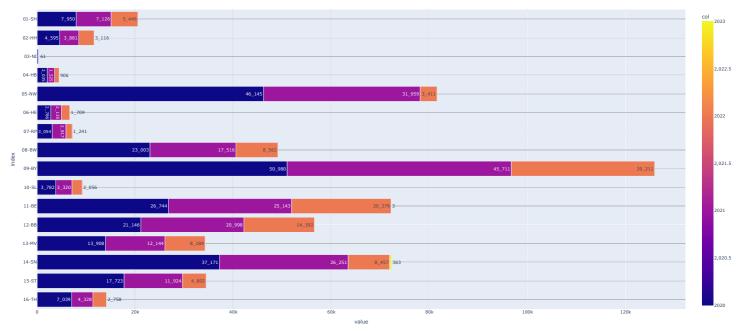


	id	bl	label	cnt
0	0	01-SH	7 - Histologie Primärtumor	14351
1	22	01-SH	3 - Todesbescheinigung (DCO)	1004
2	23	01-SH	5 - Zytologie	146

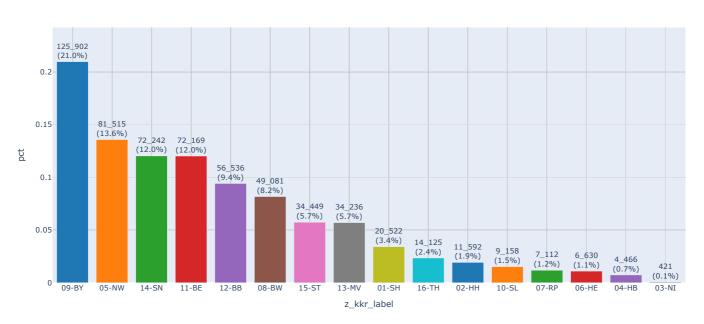
[bl] by [label], n=160 (188_481)



[z_kkr_label] by TOP10 [z_dy], n=50 (600_156)

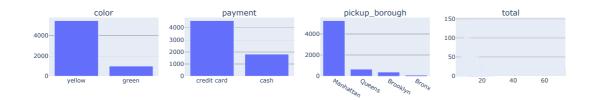


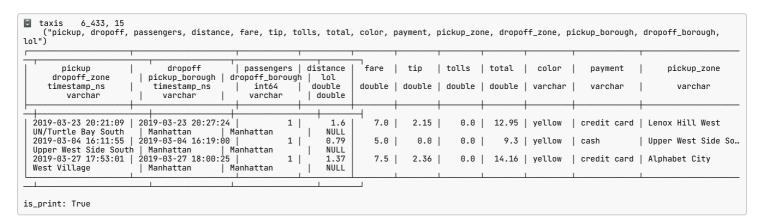
[cnt] by [z_kkr_label], n=16_357 (600_156)



shape dupli colum - index	If: taxis → e: (6_433, icates: 4_8 in stats al [0, 1, 2,	4) 803 1 (dtype 3, 4,]	-		_	ues]								
- paymen - pickup - total	(object t (object _borough ((float64 nn stats nu	3 44 object 898 0	(1%)) ['- 5 26 (<na>', 'c 9%)) ['<n< th=""><th>ash', 'cre A>', 'Bron</th><th>x', 'Bro</th><th></th><th>'Manhattan</th><th>', 'Queens</th><th>s',]</th><th></th><th></th><th></th><th></th></n<></na>	ash', 'cre A>', 'Bron	x', 'Bro		'Manhattan	', 'Queens	s',]				
column	count	min	lower	q25	median	mean	q75	upper	max	std	l cv	sum	skew	kurto
+		1.300	T		·		T			T	· ·			· *

	color	payment	pickup_borough	total
0	yellow	credit card	Manhattan	12.95
1	yellow	cash	Manhattan	9.30
2	yellow	credit card	Manhattan	14.16



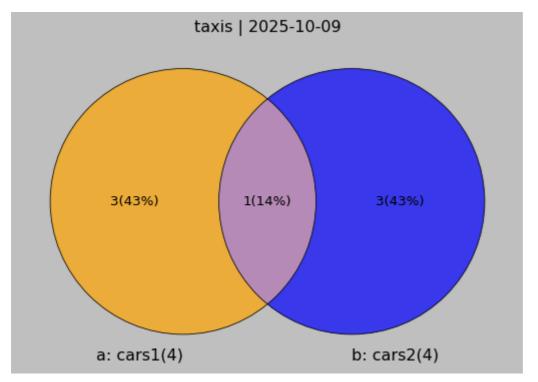


show num

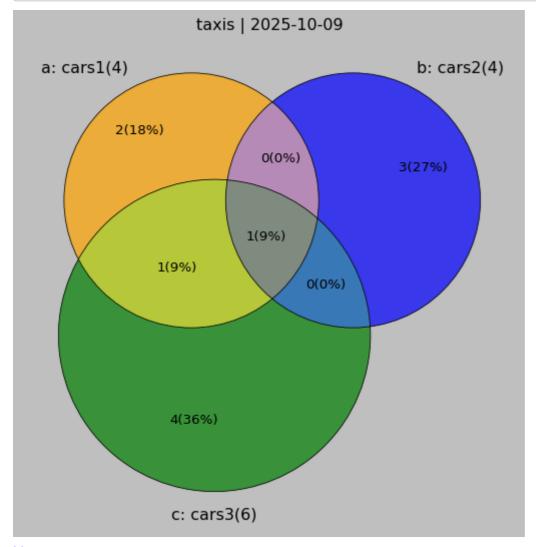
payment cash		credit o	ard na	an	Total
color					
gree	green 3_995 (4.7%)		11.6%) 📕 20	0.0%)	13_788 (16.4%)
yellow 17_012 (20.2%		2%) 📕 52_907	(62.8%) 50	0.6%)	70_427 (83.6%)
payment nan		cash	credit (card	Total
color					·
gree	n 20 (0.0%)	3_995 (4.7%	9_774	(11.6%)	13_788 (16.4%)
yello	w 508 (0.6%)	17_012 (20.:	2%) 52_907	7 (62.8%)	70_427 (83.6%)
Total 528 (0.6%)		21_006 (24.	9%) 62_681	(74.4%)	84_215 (100.0%)
distance f		fare	tip	tolls Total	
0	1.600 (2.0%)	7.000 (8.7%)	2.150 (2.7%)	0 10.75	0 (13.3%)
1	0.790 (1.0%)	5.000 (6.2%)	0	0 5.790	(7.2%)
2 1.370 (1.7%) 7.500		7.500 (9.3%)	2.360 (2.9%)	0 11.23	30 (13.9%)
3	3 7.700 (9.5%) 27.000		6.150 (7.6%)	0 40.85	0 (50.5%)
4	2.160 (2.7%)	9.000 (11.1%)	1.100 (1.4%)	0 12.26	0 (15.2%)
Total	13.620 (16.8%)	55.500 (68.6%)	11.760 (14.5%	0 (80.88	80 (100.0%)

venn

ab \longrightarrow cars1 | cars2 \longrightarrow len: 7



```
abc \longrightarrow cars1 | cars2 | cars3 \longrightarrow len: 11
ab \longrightarrow cars1 | cars2 \longrightarrow len: 7
ac \longrightarrow cars1 | cars3 \longrightarrow len: 8
bc \longrightarrow cars2 | cars3 \longrightarrow len: 9
```



hlp

|--|

```
2019-03-10 01:23:59
3
        2019-03-30 13:27:42
        2019-03-31 09:51:53
6428
6429
        2019-03-31 17:38:00
6430
        2019-03-23 22:55:18
6431
        2019-03-04 10:09:25
6432
        2019-03-13 19:31:22
Name: pickup, Length: 6433, dtype: datetime64[ns]
pat
                   z pat id
                                                z_sex | z_age | z_ag05 | Verstorben | Geburtsdatum | Geburtsdatum_Genauigkeit | DatumVitalStatus |
DatumVitalStatus_Genauigkeit |
                  varchar
                                              | varchar | double | varchar | varchar
                                                                                                      date
                                                                                                                             varchar
                                                                                                                                                          date
varchar
  450b0462-3c82-411a-ab33-9ed13286a58d | W
                                                                                                                                                 2023-06-15
                                                          83.25 | a80b84
                                                                                                1939-12-15
                                                                                                                | T
                                                                                                                                                                       | T
  TodesursacheId
                       Code
                                  Version
                                              IsGrundleiden
                                  varchar
     varchar
                      varchar
                                                 boolean
                            0 rows
tum1
| z_kkr_label | z_icd10 | Diagnosedatum | Diagnosedatum_Genauigkeit | z_tum_op_count | z_tum_st_count | z_tum_sy_count | z_tum_fo_count | z_first_treatment | z_first_treatment_after_days |
    varchar
                | varchar |
                                   date
                                                            varchar
                                                                                       int16
                                                                                                           int16
                                                                                                                               int16
                                                                                                                                                   int16
varchar
                              int32
  15-ST
                              2023-03-15
                                                                                                  5 |
                                                                                                                      0 |
                                                                                                                                          0 |
                                                                                                                                                              5 | op
                                  0 |
tum2
  z_event_order | z_events | Anzahl_Tage_Diagnose_Tod | z_period_diag_death_day | DatumPSA | z_period_diag_psa_day | z_class_hpv | z_tum_order |
                                                                                                                                                    z_last_tum_status
        varchar
                         varchar
                                                 int32
                                                                                 int32
                                                                                                       date
                                                                                                                            int64
                                                                                                                                                          varchar
     varchar
                      int8
                                                              NULL |
                                                                                             NULL | NULL
                                                                                                                                      NULL | V - Vollremission (complete)
  op-fo-op-fo-op-fo
                         op|fo
  NULL
                              5
op
                     OPId
                                                                                                                                                    | Datum_OP_Genauigkeit
                                              | Intention | Lokale_Beurteilung_Residualstatus | Anzahl_Tage_Diagnose_OP |
                                                                                                                                        Datum_OP
  {\tt z\_period\_diag\_op\_day} \ | \ {\tt z\_op\_order}
                                                 varchar
                                                                             varchar
                                                                                                                   int32
                                                                                                                                                              varchar
                  varchar
                                                                                                                                           date
          int32
                               int64
  b9336bec-c334-412d-93b5-79b8b23fba90 | K
                                                            | R1
                                                                                                                                   0 | 2023-03-15 | T
  17ed629d-0f14-4dbe-9d88-610ab6b2a291 | K
                                                            | R1
                                                                                                                                   1 | 2023-03-15 | T
  da08a401-df47-4ae5-bfbc-67790d50bdfc
                                                            | R1
                                                                                                                                 29 | 2023-04-15 | T
                       29
  a6b2e505-5d59-460c-a271-eafa9e392f18 | K
                                                            | R1
                                                                                                                                 50 | 2023-05-15 | T
                       50
  ab1e8069-adf8-46aa-adcc-a4ffb8c00b75 | K
                                                            | R0
                                                                                                                                 78 | 2023-06-15 | T
                       78 I
                                        5 |
ops
                    OPSId
                                                  Code
                                                             Version
                                                                                         OP_TypId
                   varchar
                                                varchar
                                                             varchar
                                                                                          varchar
  52be54a2-a0a2-4ba9-a907-1d59506d9f5e
                                                             2023
                                                5-182.0
                                                                         ab1e8069-adf8-46aa-adcc-a4ffb8c00b75
  6910a319-976a-4749-af8a-85f12864c473
1081731c-9595-41ac-9f31-90c1117fe47c
                                                                         able8069-adf8-46aa-adcc-a4ffb8c00b75
da08a401-df47-4ae5-bfbc-67790d50bdfc
                                                5-925.24
                                                             2023
                                                5-181.1
                                                             2023
                                                                         17ed629d-0f14-4dbe-9d88-610ab6b2a291
a6b2e505-5d59-460c-a271-eafa9e392f18
b9336bec-c334-412d-93b5-79b8b23fba90
  93f1b8fe-df4f-4ab6-be4d-b0e217776797
                                                5-903.54
                                                             2023
  48e2ac46-268f-4cd3-9773-372f176a5afd
                                                  -182.1
                                                             2023
  cb135ccc-7c90-4658-8a28-48d0e2bd830d
                                                5 - 181.1
                                                             2023
  741c8ace-2bdd-4c40-a5b5-e3fac0a8c60b
f58dd5f5-fd6c-481a-9fd7-069e6b0a99b2
                                                                         17ed629d-0f14-4dbe-9d88-610ab6b2a291
b9336bec-c334-412d-93b5-79b8b23fba90
                                                             2023
                                                5-916.74
                                                             2023
st
   STId
                            Stellung OP
              Intention
               varchar
  varcha
                 0 rows
be
```

BestrahlungId | Anzahl_Tage_Diagnose_ST | Anzahl_Tage_ST_Dauer | Datum_Beginn_Bestrahlung | Datum_Beginn_Bestrahlung_Genauigkeit | STId

z_period_diag_bestr_day | z_bestr_order

varchar	int32	date		varchar	varchar
			0 rows		
арр					
BestrahlungId TypeOfST_TypBestrahlung Stereotaktisch Atemgetriggert CodeVer varchar varchar varchar	sion2014 CodeVersion20 va	 _Zielgebiet Into 021 archar 	erstitiell_endokavita varchar		bolisch_Typ Radiochemo varchar varchar
				0 rows	
syst				T	
Datum_Beginn_SYST_Genauigkeit z_period_	rapieart Anzahl_Tage_ diag_syst_day z_syst_ archar in	Diagnose_SYST Al order t32	nzahl_Tage_SYST_Dauer int32	Datum_Beginn_SYST date	 varchar
			0 rows		
fo					
FolgeereignisId Verlauf_Tumorstatus_Fernmetastasen Datu varchar date	Gesamtbeurteilung_Tumor: m_Folgeereignis Datum varchar varchal	_Folgeereignis_Ge	nauigkeit z_fo_orde varchar		
	т	T		К	K
2023-03-15	Т	1 T	0	К	K
13a7ccd4-9133-409d-a [†] fb-479162ca06ad 2023-04-15 T 04ed157d-787b-419a-b563-b10b51cae6c6		' T 3 NULL	31	K NULL	K NULL
2023-04-15 T 927c89f6-d53e-4783-bebc-2e1d75dc66e0 2023-06-15 T		4 K 5	31	К	K
fo_tnm					
TNMId TNM_m_Symbol c_p_u_Praefix_N N varchar varchar varchar	Folgeereignis: c_p_u_Praefix_M varchar r varchar va	M L '		S UICC_Stadio archar varchar	c_p_u_Praefix_T T um varchar varchar
13a7ccd4-9133-409d-a7fb-479162ca06ad	 13a7ccd4-9133-409d-a7fb	-479162ca06ad N			
NULL	fbd74efe-266c-430c-90af	ULL NULL ['] -35d0627a6039 NI ULL NULL	ÚLL NÚLL ŃI	NULL ' NULL ' ULL NULL 1 NULL NULL	NULL NULL
04ed157d-787b-419a-b563-b10b51cae6c6 NULL	04ed157d-787b-419a-b563 NULL N	-b10b51ċae6c6 I [.] ULL L0	tem8 NÜLL r V0 Pn0	NULL NULL 1	p 1
NULL	1e58d32d-06a5-4a06-bb2c	ULL NULL ['] -1aebe34eebf0 N	NULL	NULL NULL . ULL NULL 1	NULL NULL NULL NULL
NULL NULL NULL	NULL N	ULL NULL	NULL NULL	NULL NULL	
fo_fm					
	alisation archar				
0 rows					
fo_weitere					
	dium FolgeereignisId char varchar				
0 rows					
diag_fm					
FernmetastaseId Lokalisation varchar 0 rows					
	dium char				
0 rows					

['total', 'distance']

■ Adding datetime columns basing off of: dropoff

	pickup	dropoff	passengers	distance	fare	tip	tolls	total	color	payment	 pickup_borough	dropoff_borough	lol	γγγγ	ММ	Q	үүүү- ММ	YYYYQ	YYYY- WW	DDD
0	2019-03-23 20:21:09	2019-03-23 20:27:24	1	1.60	7.0	2.15	0.0	12.95	yellow	credit card	 Manhattan	Manhattan	NaN	2019	3	1	2019- 03	2019Q1	2019- W12	Sat
1	2019-03-04 16:11:55	2019-03-04 16:19:00	1	0.79	5.0	0.00	0.0	9.30	yellow	cash	 Manhattan	Manhattan	NaN	2019	3	1	2019- 03	2019Q1	2019- W10	Mon
2	2019-03-27 17:53:01	2019-03-27 18:00:25	1	1.37	7.5	2.36	0.0	14.16	yellow	credit card	 Manhattan	Manhattan	NaN	2019	3	1	2019- 03	2019Q1	2019- W13	Wed
3	2019-03-10 01:23:59	2019-03-10 01:49:51	1	7.70	27.0	6.15	0.0	36.95	yellow	credit card	 Manhattan	Manhattan	NaN	2019	3	1	2019- 03	2019Q1	2019- W10	Sun
4	2019-03-30 13:27:42	2019-03-30 13:37:14	3	2.16	9.0	1.10	0.0	13.40	yellow	credit card	 Manhattan	Manhattan	NaN	2019	3	1	2019- 03	2019Q1	2019- W13	Sat
6428	2019-03-31 09:51:53	2019-03-31 09:55:27	1	0.75	4.5	1.06	0.0	6.36	green	credit card	 Manhattan	Manhattan	NaN	2019	3	1	2019- 03	2019Q1	2019- W13	Sun
6429	2019-03-31 17:38:00	2019-03-31 18:34:23	1	18.74	58.0	0.00	0.0	58.80	green	credit card	 Queens	Bronx	NaN	2019	3	1	2019- 03	2019Q1	2019- W13	Sun
6430	2019-03-23 22:55:18	2019-03-23 23:14:25	1	4.14	16.0	0.00	0.0	17.30	green	cash	 Brooklyn	Brooklyn	NaN	2019	3	1	2019- 03	2019Q1	2019- W12	Sat
6431	2019-03-04 10:09:25	2019-03-04 10:14:29	1	1.12	6.0	0.00	0.0	6.80	green	credit card	 Brooklyn	Brooklyn	NaN	2019	3	1	2019- 03	2019Q1	2019- W10	Mon
6432	2019-03-13 19:31:22	2019-03-13 19:48:02	1	3.85	15.0	3.36	0.0	20.16	green	credit card	 Brooklyn	Brooklyn	NaN	2019	3	1	2019- 03	2019Q1	2019- W11	Wed

6433 rows × 22 columns

[The most important themes of the draft referendum are:
1. Improving the use of health data for research and innovation particularly through the establishment of a National Data Access Point;
2. Enhancing the coordination and networking of different stakeholders involved in health data management;
3. Expanding the scope of the General Data Protection Regulation (GDPR) to cover all areas of healthcare;
4. Providing better access to health data for patients and researchers including through the development of a new law on health data protection;
5. Facilitating the exchange of health data between different countries and regions particularly within the European Union (EU);
6. Ensuring that data are used in a way that promotes sustainable development and achieves the United Nations Sustainable Development Goals (SDGs).]