## 13\_Word\_Frequency\_&\_Vector

## August 22, 2017

```
In [1]: import os
        from string import punctuation
        import pandas as pd
        import numpy as np
        import nltk
        from nltk.tokenize import RegexpTokenizer
        from nltk.stem.wordnet import WordNetLemmatizer
In [2]: df_temp = pd.read_excel('2_foidev_column_full_list_standardized.xlsx', sheetname='foidettemp')
        temp = list(df_temp['Standardized term'])
        temp = list(set(temp))
        temp.remove(np.nan)
        temp.remove('UNK')
        manufacturer = []
        for i in temp:
            i = i.upper()
            i = i.replace(' CORP.', '').replace(' CORPRATION', '').replace(' LTD', '')\
                .replace(' INC.', '').replace(', INC.', '').replace(' INCORPORATED', '').strip
            manufacturer.append(i)
            print(i)
        del df_temp, temp
MEDICAL ENGINEERING
DOW CORNING
PMT
ALLERGAN
BIOPLASTY
ALLEGIANCE HEALTHCARE
BAXTER HEALTHCARE
HUTCHISON INTERNATIONAL
POLY IMPLANT PROTHESE
NATURAL Y SURGICAL SPECIALTIES
IDEAL IMPLANT
SIENTRA
MEDICAL ENGINEERING CORPORATION
MCGHAN
BIOSIL
```

```
INAMED
EUROMED
NAGOR
MENTOR
SILIMED
In [3]: fill_type = ['SALINE', 'SILICONE', 'GEL', 'COHESIVE']
                 surface_type = ['SMOOTH', 'TEXTURED', 'BIOCELL', 'MICROCELL', 'POLYURETHANE']
                 implantation_indication = ['AUGMENTATION', 'RECONSTRUCTION', 'COSMETIC', 'REVISION']
                 ALCL = ['ALCL', 'ANAPLASTIC LARGE CELL LYMPHOMA', 'LYMPHOMA', 'T-CELL LYMPHOMA', 'B-CE
                                   'CANCER', 'TUMOR', 'SUSPECT', 'CONFIRM']
                 side = ['LEFT', 'RIGHT', 'BILATERAL', 'BOTH SIDES']
                 biomarker = ['CD 30', 'ALK', 'NEGATIVE', 'POSITIVE', 'CD30-', 'CD30+', 'ALK-', 'ALK+']
                 symptom = ['breast pain', 'breast swelling', 'breast cyst', 'breast calcification', 'calcification', 'c
                                         'lymph node enlargement', 'firmness of breast', 'hematoma', 'mass', 'lump',
                                         'infection', 'abscess', 'leukopenia', 'nodules', 'skin discoloration', 'ski
                                         'effusion', 'fluid', 'edema', 'leak', 'redness', 'tenderness', 'erythema',
In [4]: df_BI_DEV = pd.read_csv('WF/DEV_BI_FULL_TABLE.txt', sep='|', header=0, encoding='ISO-8
                 df_BI_DEV = df_BI_DEV.drop_duplicates()
                 df_BI_TEXT = pd.read_csv('WF/TEXT_FULL_BI_LIST.txt', sep='|', header=0, encoding='ISO-
                 df_BI_TEXT = df_BI_TEXT.drop_duplicates('MDR_TEXT_KEY')
                 print('Device #:', df_BI_DEV.shape[0])
                 print('Text #:', df_BI_TEXT.shape[0])
                 df_BI = df_BI_TEXT.merge(df_BI_DEV, on='MDR_REPORT_KEY', how='inner')
                 df_BI['MANUFACTURER_D_NAME'] = df_BI['MANUFACTURER_D_NAME'].astype(str)
                 df_BI['BRAND_NAME'] = df_BI['BRAND_NAME'].astype(str)
                 df_BI['GENERIC_NAME'] = df_BI['GENERIC_NAME'].astype(str)
                 df_BI['FOI_TEXT'] = df_BI['FOI_TEXT'].astype(str)
                 df_BI = df_BI.drop_duplicates()
                 print('Full table #:', df_BI.shape[0])
Device #: 28182
Text #: 27137
Full table #: 28301
In [6]: def text_search(text, k):
                         l = text.split(' ')
                          if ' ' in k:
                                  if k in text:
                                          return True
                                  else:
                                          return False
                          else:
                                  if k in 1:
                                          return True
```

COX-UPHOFF INTERNATIONAL

```
else:
                    return False
        def filter_merge(f1, f2, f3):
            return (f1 | f2 | f3)
In [7]: print('Manufacturer word frequecy:\n')
        for m in manufacturer:
            df_BI['filter'] = np.vectorize(text_search)(df_BI['MANUFACTURER_D_NAME'], m)
            temp = df_BI.loc[df_BI['filter']==True, :]
            del df_BI['filter']
            temp.to_csv('WF_FULL_TABLE/manufacturer/'+m+'.txt', header=True, sep='|', index=Fa
            print(m, ':', temp.shape[0])
            del temp
Manufacturer word frequecy:
MEDICAL ENGINEERING: 1542
DOW CORNING: 3630
PMT : 22
ALLERGAN: 2565
BIOPLASTY: 8
ALLEGIANCE HEALTHCARE: 14
BAXTER HEALTHCARE: 351
HUTCHISON INTERNATIONAL: 2
POLY IMPLANT PROTHESE: 3
NATURAL Y SURGICAL SPECIALTIES : 1
IDEAL IMPLANT: 57
SIENTRA: 19
MEDICAL ENGINEERING CORPORATION : 3
MCGHAN: 2141
BIOSIL: 1681
COX-UPHOFF INTERNATIONAL: 2
INAMED: 199
EUROMED : 0
NAGOR: 4
MENTOR: 3502
SILIMED: 7
In [8]: print('Surface type word frequecy:\n')
        for s in surface_type:
            df_BI['filter_1'] = np.vectorize(text_search)(df_BI['BRAND_NAME'], s)
            df_BI['filter_2'] = np.vectorize(text_search)(df_BI['GENERIC_NAME'], s)
            df_BI['filter_3'] = np.vectorize(text_search)(df_BI['FOI_TEXT'], s)
            df_BI['filter'] = np.vectorize(filter_merge)(df_BI['filter_1'], df_BI['filter_2'],
            temp = df_BI.loc[df_BI['filter']==True, :]
```

del df\_BI['filter'], df\_BI['filter\_1'], df\_BI['filter\_2'], df\_BI['filter\_3']

```
temp.to_csv('WF_FULL_TABLE/surface/'+s+'.txt', header=True, sep='|', index=False)
            print(s, ':', temp.shape[0])
            del temp
Surface type word frequecy:
SMOOTH: 1014
TEXTURED: 746
BIOCELL: 71
MICROCELL: 1
POLYURETHANE: 120
In [9]: print('Fill type word frequecy:\n')
        for f in fill_type:
            df_BI['filter_1'] = np.vectorize(text_search)(df_BI['BRAND_NAME'], f)
            df_BI['filter_2'] = np.vectorize(text_search)(df_BI['GENERIC_NAME'], f)
            df_BI['filter_3'] = np.vectorize(text_search)(df_BI['FOI_TEXT'], f)
            df_BI['filter'] = np.vectorize(filter_merge)(df_BI['filter_1'], df_BI['filter_2'],
            temp = df_BI.loc[df_BI['filter']==True, :]
            del df_BI['filter'], df_BI['filter_1'], df_BI['filter_2'], df_BI['filter_3']
            temp.to_csv('WF_FULL_TABLE/fill/'+f+'.txt', header=True, sep='|', index=False)
            print(f, ':', temp.shape[0])
            del temp
Fill type word frequecy:
SALINE: 7272
SILICONE: 10985
GEL: 5062
COHESIVE: 357
In [10]: print('Implantation indication word frequecy:\n')
         for i in implantation_indication:
             df_BI['filter'] = np.vectorize(text_search)(df_BI['FOI_TEXT'], i)
             temp = df_BI.loc[df_BI['filter']==True, :]
             del df_BI['filter']
             temp.to_csv('WF_FULL_TABLE/implantation_indication/'+i+'.txt', header=True, sep='
             print(i, ':', temp.shape[0])
             del temp
Implantation indication word frequecy:
AUGMENTATION: 1513
RECONSTRUCTION: 864
COSMETIC: 234
REVISION: 291
```

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In [11]: print('ALCL word frequecy:\n')
         for m in ALCL:
             df_BI['filter'] = np.vectorize(text_search)(df_BI['FOI_TEXT'], m)
             temp = df_BI.loc[df_BI['filter']==True, :]
             del df BI['filter']
             temp.to_csv('WF_FULL_TABLE/ALCL/'+m+'.txt', header=True, sep='|', index=False)
             print(m, ':', temp.shape[0])
             del temp
ALCL word frequecy:
ALCL: 551
ANAPLASTIC LARGE CELL LYMPHOMA: 492
LYMPHOMA: 642
T-CELL LYMPHOMA: 74
B-CELL LYMPHOMA : 1
CANCER: 444
TUMOR: 63
SUSPECT: 34
CONFIRM: 185
In [12]: print('Side word frequecy:\n')
         for s in side:
             df_BI['filter'] = np.vectorize(text_search)(df_BI['FOI_TEXT'], s)
             temp = df_BI.loc[df_BI['filter']==True, :]
             del df_BI['filter']
             temp.to_csv('WF_FULL_TABLE/side/'+s+'.txt', header=True, sep='|', index=False)
             print(s, ':', temp.shape[0])
             del temp
Side word frequecy:
LEFT : 6667
RIGHT: 6755
BILATERAL: 6841
BOTH SIDES: 98
In [13]: print('Biomarker word frequecy:\n')
         for b in biomarker:
             df_BI['filter'] = np.vectorize(text_search)(df_BI['FOI_TEXT'], b)
             temp = df_BI.loc[df_BI['filter']==True, :]
             del df BI['filter']
             temp.to_csv('WF_FULL_TABLE/biomarker/'+b+'.txt', header=True, sep='|', index=False
             print(b, ':', temp.shape[0])
             del temp
Biomarker word frequecy:
```

```
CD 30 : 7
ALK : 71
NEGATIVE: 172
POSITIVE: 411
CD30- : 0
CD30+ : 53
ALK- : 35
ALK+ : O
In [14]: print('Symptom word frequecy:\n')
         for s in symptom:
             s = s.upper()
             df_BI['filter'] = np.vectorize(text_search)(df_BI['FOI_TEXT'], s)
             temp = df_BI.loc[df_BI['filter']==True, :]
             del df_BI['filter']
             temp.to_csv('WF_FULL_TABLE/symptom/'+s+'.txt', header=True, sep='|', index=False)
             print(s, ':', temp.shape[0])
             del temp
Symptom word frequecy:
BREAST PAIN: 713
BREAST SWELLING: 33
BREAST CYST : 6
BREAST CALCIFICATION: 2
CAPSULAR CONTRACTURE: 3104
LYMPH NODE ENLARGEMENT : 3
FIRMNESS OF BREAST : 5
HEMATOMA: 177
MASS: 195
LUMP : 171
RUPTURE: 1788
DEFLATED: 620
INFECTION: 545
ABSCESS : 26
LEUKOPENIA: 0
NODULES: 51
SKIN DISCOLORATION: 13
SKIN LESION: 16
SEROMA: 528
EFFUSION: 26
FLUID: 584
EDEMA: 34
LEAK : 267
REDNESS: 110
TENDERNESS: 142
ERYTHEMA: 27
```

```
In [15]: full_list = {'manufacturer':manufacturer, 'fill':fill_type, 'surface':surface_type,
                       'implantation_indication':implantation_indication, 'ALCL':ALCL, 'side':s
                       'biomarker':biomarker, 'symptom':symptom}
         df_vector = pd.DataFrame()
         df_vector['MDR_REPORT_KEY'] = df_BI['MDR_REPORT_KEY']
         for key, value in full_list.items():
             for w in value:
                 temp = pd.read_csv(os.path.join('WF_FULL_TABLE', key, w+'.txt'), sep='|', head
                                     encoding='ISO-8859-1', error_bad_lines=False)
                 key_list = list(temp['MDR_REPORT_KEY'])
                 del temp
                 for k in key_list:
                     df_vector.loc[df_vector['MDR_REPORT_KEY']==k, w] = 1
                     df_vector[w] = df_vector[w].fillna(0)
                 except:
                      continue
         for c in df_vector.columns.values:
             df_vector[c] = df_vector[c].astype(int)
         df_vector.to_csv('keyword_vector.txt', sep='|', header=True, index=False)
         df_vector.head(20)
Out[15]:
             MDR_REPORT_KEY MEDICAL ENGINEERING
                                                    DOW CORNING
                                                                 PMT
                                                                      ALLERGAN
                    6730886
                                                 0
                                                                              1
         1
                    6730886
                                                 0
                                                              0
                                                                   0
                                                                              1
         2
                    6734192
                                                 0
                                                              0
                                                                   0
                                                                              1
         3
                                                 0
                                                              0
                                                                   0
                                                                              1
                    6734192
         4
                                                 0
                                                              0
                                                                   0
                                                                              0
                    6283766
         5
                                                 0
                                                              0
                                                                   0
                                                                              0
                    6283766
         6
                                                 0
                                                              0
                                                                   0
                                                                              0
                    6533466
         7
                    6533466
                                                 0
                                                              0
                                                                   0
                                                                              0
         8
                                                 0
                                                              0
                                                                   0
                                                                              1
                    6315557
         9
                    6315557
                                                 0
                                                              0
                                                                   0
                                                                              1
         10
                    6747770
                                                 0
                                                              0
                                                                   0
                                                                              1
         11
                                                 0
                                                              0
                                                                   0
                                                                              1
                    6747770
         12
                                                 0
                                                              0
                                                                   0
                                                                              1
                    6739134
                                                 0
                                                              0
                                                                   0
         13
                    6739134
                                                                              1
         14
                    6749011
                                                 0
                                                              0
                                                                   0
                                                                              0
                                                              0
         15
                    6749011
                                                 0
                                                                   0
                                                                              0
```

ASYMMETRY: 163

BREAST ENLARGEMENT : 10

| 17<br>18   |           | 18046<br>75181 |   | 0        | 0   | 0   | 1<br>1 |   |
|--|-----------|----------------|---|----------|---|-----|--------|---|
| 19   |           | '5181          |   | 0        | 0   | 0   | 1      |   |
|  |           |                |   |          |   |     |        |   |
|  | BIOPLASTY | ALLEGIANCE     | HEALTHCARE  | BAXTER   |   | \   |        |   |
| 0  | 0         |                | 0   |          | 0   |     |        |   |
| 1  | 0         |                | 0   |          | 0   |     |        |   |
| 2  | 0         |                | 0   |          | 0   |     |        |   |
| 3<br>4   | 0         |                | 0   |          | 0   |     |        |   |
| <del>4</del><br>5  | 0         |                | 0   |          | 0   |     |        |   |
| 6  | 0         |                | 0   |          | 0   |     |        |   |
| 7  | 0         |                | 0   |          | 0   |     |        |   |
| 8  | 0         |                | 0   |          | 0   |     |        |   |
| 9  | 0         |                | 0   |          | 0   |     |        |   |
| 10   | 0         |                | 0   |          | 0   |     |        |   |
| 11   | 0         |                | 0   |          | 0   |     |        |   |
| 12   | 0         |                | 0   |          | 0   |     |        |   |
| 13   | 0         |                | 0   |          | 0   |     |        |   |
| 14   | 0         |                | 0   |          | 0   |     |        |   |
| 15   | 0         |                | 0   |          | 0   |     |        |   |
| 16   | 0         |                | 0   |          | 0   |     |        |   |
| 17   | 0         |                | 0   |          | 0   |     |        |   |
| 18   | 0         |                | 0   |          | 0   |     |        |   |
|  | _         |                |   |          |   |     |        |   |
| 19   | 0         |                | 0   |          | 0   |     |        |   |
| 19   |           | INTERNATIONA   | 0   | LANT PRO | 0   |     |        | \ |
| 19   |           | INTERNATIONA   | 0   | LANT PRO | 0   |     | · •    | \ |
|  |           | INTERNATIONA   | O<br>AL POLY IMP                                    | LANT PRO | O<br>DTHESE                                     | • • |        | \ |
| 0<br>1<br>2  |           | INTERNATIONA   | O<br>AL POLY IMP<br>O                               | LANT PR( | O<br>OTHESE<br>O                                |     |        | \ |
| 0<br>1<br>2<br>3   |           | INTERNATIONA   | O<br>AL POLY IMP<br>O<br>O                          | LANT PRO | O<br>DTHESE<br>0<br>0                           |     |        | \ |
| 0<br>1<br>2<br>3<br>4  |           | INTERNATIONA   | O AL POLY IMPO                                      | LANT PRO | O<br>DTHESE<br>0<br>0<br>0<br>0<br>0            |     |        | \ |
| 0<br>1<br>2<br>3<br>4<br>5   |           | INTERNATIONA   | O AL POLY IMPO                                      | LANT PRO | ODTHESE<br>0<br>0<br>0<br>0<br>0                |     |        | \ |
| 0<br>1<br>2<br>3<br>4<br>5   |           | INTERNATIONA   | O AL POLY IMPO                                      | LANT PRO | OTHESE<br>0<br>0<br>0<br>0<br>0<br>0            |     |        | \ |
| 0<br>1<br>2<br>3<br>4<br>5<br>6<br>7   |           | INTERNATIONA   | O AL POLY IMPO                                      | LANT PRO | ODTHESE<br>0<br>0<br>0<br>0<br>0<br>0<br>0      |     |        | \ |
| 0<br>1<br>2<br>3<br>4<br>5<br>6<br>7<br>8  |           | INTERNATIONA   | O DAL POLY IMPO                                     | LANT PRO | ODTHESE<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0 |     |        | \ |
| 0<br>1<br>2<br>3<br>4<br>5<br>6<br>7<br>8  |           | INTERNATIONA   | O AL POLY IMP O O O O O O O O O O O O O O O O O O O | LANT PRO | OTHESE<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0  |     |        | \ |
| 0<br>1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br>9   |           | INTERNATIONA   | O AL POLY IMPO O O O O O O O O O O O O O O O O O O  | LANT PRO | ODTHESE  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0          |     |        | \ |
| 0<br>1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>10<br>11                               |           | INTERNATIONA   | O AL POLY IMPO O O O O O O O O O O O O O O O O O O  | LANT PRO | ODTHESE  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0    |     |        | \ |
| 0<br>1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>10<br>11<br>12                         |           | INTERNATIONA   | O AL POLY IMPO O O O O O O O O O O O O O O O O O O  | LANT PRO | ODTHESE  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0    |     |        | \ |
| 0<br>1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>10<br>11<br>12<br>13                   |           | INTERNATIONA   | O AL POLY IMP O O O O O O O O O O O O O O O O O O O | LANT PRO | ODTHESE  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0    |     |        |   |
| 0<br>1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>10<br>11<br>12<br>13<br>14             |           | INTERNATIONA   | O AL POLY IMPO O O O O O O O O O O O O O O O O O O  | LANT PRO | ODTHESE  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0    |     |        |   |
| 0<br>1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>10<br>11<br>12<br>13                   |           | INTERNATIONA   | O AL POLY IMPO O O O O O O O O O O O O O O O O O O  | LANT PRO | ODTHESE  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0    |     |        |   |
| 0<br>1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>10<br>11<br>12<br>13<br>14<br>15       |           | INTERNATIONA   | O AL POLY IMPO O O O O O O O O O O O O O O O O O O  | LANT PRO | ODTHESE  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0    |     |        |   |
| 0<br>1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>10<br>11<br>12<br>13<br>14<br>15<br>16 |           | INTERNATIONA   | O AL POLY IMP O O O O O O O O O O O O O O O O O O O | LANT PRO | ODTHESE  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0    |     |        |   |

|    | seroma | effusion | fluid | edema | leak | redness | tenderness | erythema | \ |
|----|--------|----------|-------|-------|------|---------|------------|----------|---|
| 0  | 0      | 0        | 0     | 0     | 1    | 0       | 0          | 0        |   |
| 1  | 0      | 0        | 0     | 0     | 1    | 0       | 0          | 0        |   |
| 2  | 0      | 0        | 0     | 0     | 0    | 0       | 0          | 0        |   |
| 3  | 0      | 0        | 0     | 0     | 0    | 0       | 0          | 0        |   |
| 4  | 0      | 0        | 0     | 0     | 0    | 0       | 0          | 0        |   |
| 5  | 0      | 0        | 0     | 0     | 0    | 0       | 0          | 0        |   |
| 6  | 0      | 0        | 0     | 0     | 0    | 0       | 0          | 0        |   |
| 7  | 0      | 0        | 0     | 0     | 0    | 0       | 0          | 0        |   |
| 8  | 1      | 0        | 1     | 0     | 0    | 0       | 0          | 0        |   |
| 9  | 1      | 0        | 1     | 0     | 0    | 0       | 0          | 0        |   |
| 10 | 0      | 0        | 0     | 0     | 0    | 0       | 0          | 0        |   |
| 11 | 0      | 0        | 0     | 0     | 0    | 0       | 0          | 0        |   |
| 12 | 0      | 0        | 0     | 0     | 0    | 0       | 0          | 0        |   |
| 13 | 0      | 0        | 0     | 0     | 0    | 0       | 0          | 0        |   |
| 14 | 0      | 0        | 0     | 0     | 0    | 0       | 0          | 0        |   |
| 15 | 0      | 0        | 0     | 0     | 0    | 0       | 0          | 0        |   |
| 16 | 0      | 0        | 0     | 0     | 0    | 0       | 0          | 0        |   |
| 17 | 0      | 0        | 0     | 0     | 0    | 0       | 0          | 0        |   |
| 18 | 0      | 0        | 0     | 0     | 0    | 0       | 0          | 0        |   |
| 19 | 0      | 0        | 0     | 0     | 0    | 0       | 0          | 0        |   |

| asymmetry | breast | en. | Largement |
|-----------|--------|-----|-----------|
| _         |        |     | _         |

| 0  | 0 | C | ) |
|----|---|---|---|
| 1  | 0 | C | ) |
| 2  | 0 | C | ) |
| 3  | 0 | C | ) |
| 4  | 0 | C | ) |
| 5  | 0 | C | ) |
| 6  | 0 | C | ) |
| 7  | 0 | C | ) |
| 8  | 0 | C | ) |
| 9  | 0 | C | ) |
| 10 | 0 | C | ) |
| 11 | 0 | C | ) |
| 12 | 0 | C | ) |
| 13 | 0 | C | ) |
| 14 | 0 | C | ) |
| 15 | 0 | C | ) |
| 16 | 0 | C | ) |
| 17 | 0 | C | ) |
| 18 | 0 | C | ) |
| 19 | 0 | C | ) |

[20 rows x 80 columns]

```
In [16]: df_vector = pd.read_csv('keyword_vector.txt', sep='|', header=0, encoding='ISO-8859-1
        print('Before:', df_vector.shape[0])
```

```
temp = df_BI[['MDR_REPORT_KEY', 'MANUFACTURER_D_NAME', 'BRAND_NAME', 'GENERIC_NAME',
df_vector = df_vector.merge(temp, on=['MDR_REPORT_KEY'], how='inner')
df_vector = df_vector.drop_duplicates()
print('After:', df_vector.shape[0])
df_vector.to_csv('keyword_vector.txt', sep='|', header=True, index=False)
df_vector.head(20)
```

Before: 28301 After: 27341

| Out[16]: | MDR_REPORT_KEY | MEDICAL ENGINEERIN |        |            | TM  | ALLERGAN | \ |
|----------|----------------|--------------------|--------|------------|-----|----------|---|
| 0        | 6730886        |                    | 0      | 0          | 0   | 1        |   |
| 1        | 6730886        |                    | 0      | 0          | 0   | 1        |   |
| 4        | 6734192        |                    | 0      | 0          | 0   | 1        |   |
| 5        | 6734192        |                    | 0      | 0          | 0   | 1        |   |
| 8        | 6283766        |                    | 0      | 0          | 0   | 0        |   |
| 9        | 6283766        |                    | 0      | 0          | 0   | 0        |   |
| 12       | 6533466        |                    | 0      | 0          | 0   | 0        |   |
| 16       | 6315557        |                    | 0      | 0          | 0   | 1        |   |
| 17       | 6315557        |                    | 0      | 0          | 0   | 1        |   |
| 20       | 6747770        |                    | 0      | 0          | 0   | 1        |   |
| 21       | 6747770        |                    | 0      | 0          | 0   | 1        |   |
| 24       | 6739134        |                    | 0      | 0          | 0   | 1        |   |
| 25       | 6739134        |                    | 0      | 0          | 0   | 1        |   |
| 28       | 6749011        |                    | 0      | 0          | 0   | 0        |   |
| 29       | 6749011        |                    | 0      | 0          | 0   | 0        |   |
| 32       | 6748046        |                    | 0      | 0          | 0   | 1        |   |
| 33       | 6748046        |                    | 0      | 0          | 0   | 1        |   |
| 36       | 6275181        |                    | 0      | 0          | 0   | 1        |   |
| 37       | 6275181        |                    | 0      | 0          | 0   | 1        |   |
| 40       | 6275184        |                    | 0      | 0          | 0   | 1        |   |
|          | BIOPLASTY ALLE | GIANCE HEALTHCARE  | BAXTER | HEALTHCARE | : \ |          |   |
| 0        | 0              | 0                  |        | C          | )   |          |   |
| 1        | 0              | 0                  |        | C          | )   |          |   |
| 4        | 0              | 0                  |        | C          | )   |          |   |
| 5        | 0              | 0                  |        | C          | )   |          |   |
| 8        | 0              | 0                  |        | C          | )   |          |   |
| 9        | 0              | 0                  |        | C          | )   |          |   |
| 12       | 0              | 0                  |        | C          | )   |          |   |
| 16       | 0              | 0                  |        | C          | )   |          |   |
| 17       | 0              | 0                  |        | C          | )   |          |   |
| 20       | 0              | 0                  |        | C          | )   |          |   |
| 21       | 0              | 0                  |        | C          | )   |          |   |
| 24       | 0              | 0                  |        | C          | )   |          |   |
| 25       | 0              | 0                  |        | C          | )   |          |   |
| 28       | 0              | 0                  |        | C          | )   |          |   |

| 29<br>32<br>33<br>36<br>37   | 0<br>0<br>0<br>0 |               |      | 0<br>0<br>0<br>0 |   | ( | )<br>)<br>)<br>)   |  |   |
|--|------------------|---------------|------|------------------|---|---|--|--|---|
| 40   | 0                |               |      | 0                |   | ( | )  |  |   |
|  | HUTCHISON        | INTERNATIONAL | POLY | IMPLANT          |   | \ |  |  |   |
| 0  |                  | 0             |      |                  | 0 |   |  |  |   |
| 1<br>4   |                  | 0             |      |                  | 0 |   |  |  |   |
| 5  |                  | 0             |      |                  | 0 |   |  |  |   |
| 8  |                  | 0             |      |                  | 0 |   |  |  |   |
| 9  |                  | 0             |      |                  | 0 |   |  |  |   |
| 12   |                  | 0             |      |                  | 0 |   |  |  |   |
| 16   |                  | 0             |      |                  | 0 |   |  |  |   |
| 17<br>20   |                  | 0             |      |                  | 0 |   |  |  |   |
| 21   |                  | 0             |      |                  | 0 |   |  |  |   |
| 24   |                  | 0             |      |                  | 0 |   |  |  |   |
| 25   |                  | 0             |      |                  | 0 |   |  |  |   |
| 28   |                  | 0             |      |                  | 0 |   |  |  |   |
| 29   |                  | 0             |      |                  | 0 |   |  |  |   |
| 32<br>33   |                  | 0             |      |                  | 0 |   |  |  |   |
| 36   |                  | 0             |      |                  | 0 |   |  |  |   |
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| 10   |                  | •             |      |                  |   |   |  |  |   |
| 10   |                  | Ţ.            |      |                  |   |   |  |  |   |
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| 0<br>1<br>4<br>5<br>8  |                  |               |      |                  |   |   | 1<br>1<br>0<br>0<br>0                                    | 0<br>0<br>0<br>0<br>0                          | \ |
| 0<br>1<br>4<br>5<br>8<br>9<br>12   |                  |               |      |                  |   |   | 1<br>0<br>0<br>0<br>0<br>0                               | 0<br>0<br>0<br>0<br>0<br>0                     | \ |
| 0<br>1<br>4<br>5<br>8<br>9<br>12<br>16   |                  |               |      |                  |   |   | 1<br>0<br>0<br>0<br>0<br>0                               | 0<br>0<br>0<br>0<br>0<br>0                     | \ |
| 0<br>1<br>4<br>5<br>8<br>9<br>12<br>16<br>17   |                  |               |      |                  |   |   | 1<br>1<br>0<br>0<br>0<br>0<br>0<br>0                     | 0<br>0<br>0<br>0<br>0<br>0<br>0                |   |
| 0<br>1<br>4<br>5<br>8<br>9<br>12<br>16<br>17<br>20                                     |                  |               |      |                  |   |   | 1<br>0<br>0<br>0<br>0<br>0                               | 0<br>0<br>0<br>0<br>0<br>0<br>0                | \ |
| 0<br>1<br>4<br>5<br>8<br>9<br>12<br>16<br>17   |                  |               |      |                  |   |   | 1<br>0<br>0<br>0<br>0<br>0<br>0<br>0                     | 0<br>0<br>0<br>0<br>0<br>0<br>0                | \ |
| 0<br>1<br>4<br>5<br>8<br>9<br>12<br>16<br>17<br>20<br>21<br>24<br>25                   |                  |               |      |                  |   |   | 1<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0           | 0<br>0<br>0<br>0<br>0<br>0<br>0<br>0           | \ |
| 0<br>1<br>4<br>5<br>8<br>9<br>12<br>16<br>17<br>20<br>21<br>24<br>25<br>28             |                  |               |      |                  |   |   | 1<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0           | 0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0      | \ |
| 0<br>1<br>4<br>5<br>8<br>9<br>12<br>16<br>17<br>20<br>21<br>24<br>25<br>28<br>29       |                  |               |      |                  |   |   | 1<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0      | 0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0      | \ |
| 0<br>1<br>4<br>5<br>8<br>9<br>12<br>16<br>17<br>20<br>21<br>24<br>25<br>28<br>29<br>32 |                  |               |      |                  |   |   | 1<br>1<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0 | 0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0 | \ |
| 0<br>1<br>4<br>5<br>8<br>9<br>12<br>16<br>17<br>20<br>21<br>24<br>25<br>28<br>29       |                  |               |      |                  |   |   | 1<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0      | 0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0      | \ |

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                                                            BRAND_NAME
      MANUFACTURER_D_NAME
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    ALLERGAN (COSTA RICA)
                                                   UNK SALINE IMPLANT
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    ALLERGAN (COSTA RICA)
                                                   UNK SALINE IMPLANT
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    ALLERGAN (COSTA RICA)
                              STYLE 68 SALINE FILLED BREAST IMPLANT
    ALLERGAN (COSTA RICA)
                               STYLE 68 SALINE FILLED BREAST IMPLANT
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             IDEAL IMPLANT
                             IDEAL IMPLANT STRUCTURED BREAST IMPLANT
            IDEAL IMPLANT
                             IDEAL IMPLANT STRUCTURED BREAST IMPLANT
9
12
                    MENTOR
                                            MEMORY GEL BREAST IMPLANT
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    ALLERGAN (COSTA RICA)
                                                  UNK MAMMARY IMPLANT
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    ALLERGAN (COSTA RICA)
                                                  UNK MAMMARY IMPLANT
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    ALLERGAN (COSTA RICA)
                              STYLE 68 SALINE FILLED BREAST IMPLANT
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    ALLERGAN (COSTA RICA)
                              STYLE 68 SALINE FILLED BREAST IMPLANT
    ALLERGAN (COSTA RICA)
                              STYLE 168 SALINE FILLED BREAST IMPLANT
    ALLERGAN (COSTA RICA)
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     MENTOR WORLDWIDE LLC
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    ALLERGAN (COSTA RICA)
                              STYLE 68 SALINE FILLED BREAST IMPLANT
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    ALLERGAN (COSTA RICA)
                              STYLE 68 SALINE FILLED BREAST IMPLANT
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    ALLERGAN (COSTA RICA)
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    ALLERGAN (COSTA RICA)
                                                  UNK MAMMARY IMPLANT
    ALLERGAN (COSTA RICA)
                                                  UNK MAMMARY IMPLANT
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GENERIC\_NAME \

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PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
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            PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
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            PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
            PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
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                                SALINE-FILLED BREAST IMPLANT
        9
                                 SALINE-FILLED BREAST IMPLANT
        12
                                               BREAST IMPLANT
            PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
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            PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
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        20 PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
            PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
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         24 PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
            PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
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                                               BREAST IMPLANT
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         32 PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
        33 PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
        36 PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
        37 PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
         40 PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
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            HEALTHCARE PROFESSIONAL REPORTED A LEFT SIDE D...
            DEVICE EVALUATION: VISUAL ANALYSIS OF THE RETU...
         1
         4
            THE DEVICE REMAINS IMPLANTED. A REVIEW OF THE ...
         5
            PATIENT REPORTED THAT THE LEFT SIDE "HAS COLLA...
                          DEFLATION RESULTING IN EXPLANTATION.
        8
         9
         12 I HAD A BREAST AUGMENTATION ON (B)(6) 2015. SI...
         16 THERAPEUTIC GOODS ADMINISTRATION REPORTED "CON...
            THE EVENT OF LYMPHOMA IS A PHYSIOLOGICAL COMPL...
         20 A REVIEW OF THE DEVICE HISTORY RECORD HAS BEEN...
         21 HEALTHCARE PROFESSIONAL REPORTED RIGHT SIDE PO...
        24 HEALTHCARE PROFESSIONAL REPORTED A LEFT SIDE D...
        25 A REVIEW OF THE DEVICE HISTORY RECORD HAS BEEN...
        28 NO DEVICE WAS RECEIVED FOR ANALYSIS AT THE TIM...
         29 IT WAS REPORTED THAT THE PATIENT HAS SUFFERED ...
         32 HEALTH PROFESSIONAL REPORTED RIGHT SIDE £RUPT...
        33 A REVIEW OF THE DEVICE HISTORY RECORD HAS BEEN...
         36 ARTICLE CITATION: £TWO-STAGE IMPLANT-BASED BR...
        37 ARTICLE, £TWO-STAGE IMPLANT-BASED BREAST RECO...
        40 ARTICLE, £TWO-STAGE IMPLANT-BASED BREAST RECO...
         [20 rows x 84 columns]
In [20]: print('Is there saline and silicone at the same time?')
         df_vector.loc[(df_vector['SALINE']==1) & (df_vector['SILICONE']==1), :]
Is there saline and silicone at the same time?
```

| Out[20]: | MDR_REPORT_KEY | MEDICAL ENGINEERING | DOW CORNING | PMT   | ALLERGAN \ |
|----------|----------------|---------------------|-------------|-------|------------|
| 68       | 6553778        | 0                   | 1           | 0     | 0          |
| 69       | 6553778        | 0                   | 1           | 0     | 0          |
| 97       | 6751940        | 0                   | 0           | 0     | 1          |
| 98       | 6751940        | 0                   | 0           | 0     | 1          |
| 125      | 6732140        | 0                   | 0           | 0     | 1          |
| 126      | 6732140        | 0                   | 0           | 0     | 1          |
| 181      | 6378780        | 0                   | 0           | 0     | 1          |
| 182      | 6378780        | 0                   | 0           | 0     | 1          |
| 201      | 6748708        | 0                   | 0           | 0     | 1          |
| 202      | 6748708        | 0                   | 0           | 0     | 1          |
| 257      | 6736742        | 0                   | 0           | 0     | 0          |
| 258      |                | 0                   | 0           | 0     | 0          |
| 306      |                | 0                   | 0           | 0     | 1          |
| 307      | 6567317        | 0                   | 0           | 0     | 1          |
| 366      | 6750199        | 0                   | 0           | 0     | 0          |
| 367      | 6750199        | 0                   | 0           | 0     | 0          |
| 545      | 6498449        | 0                   | 0           | 0     | 0          |
| 546      | 6498449        | 0                   | 0           | 0     | 0          |
| 574      |                | 0                   | 0           | 0     | 1          |
| 575      |                | 0                   | 0           | 0     | 1          |
| 620      |                | 0                   | 0           | 0     | 1          |
| 621      |                | 0                   | 0           | 0     | 1          |
| 624      |                | 0                   | 0           | 0     | 1          |
| 625      |                | 0                   | 0           | 0     | 1          |
| 854      |                | 0                   | 0           | 0     | 0          |
| 855      |                | 0                   | 0           | 0     | 0          |
| 976      |                | 0                   | 0           | 0     | 0          |
| 988      |                | 0                   | 0           | 0     | 1          |
| 989      |                | 0                   | 0           | 0     | 1          |
| 990      | 6460781        | 0                   | 0           | 0     | 1          |
|          | •••            | •••                 | • • •       | • • • | • • •      |
| 357      |                | 0                   | 0           | 0     | 0          |
| 359      |                | 0                   | 0           | 0     | 1          |
| 359      |                | 0                   | 0           | 0     | 1          |
| 359      |                | 0                   | 0           | 0     | 1          |
| 359      |                | 0                   | 0           | 0     | 1          |
| 360      |                | 0                   | 0           | 0     | 0          |
| 360      |                | 0                   | 0           | 0     | 0          |
| 361      |                | 0                   | 0           | 0     | 0          |
| 361      |                | 0                   | 0           | 0     | 0          |
| 361:     |                | 0                   | 0           | 0     | 0          |
| 361:     |                | 0                   | 0           | 0     | 0          |
| 361      |                | 0                   | 0           | 0     | 0          |
| 361      |                | 0                   | 0           | 0     | 0          |
| 361      | 62 6156904     | 0                   | 0           | 0     | 0          |

| 36163<br>36208<br>36249<br>36250<br>36389<br>36390<br>36392 | 613<br>569<br>569<br>542<br>542 | 6904<br>1484<br>7586<br>7586<br>7646<br>7646<br>7646 |            | 0<br>0<br>0<br>0<br>0 | 0<br>0<br>0<br>0<br>0 | 0<br>0<br>0<br>0<br>0 |
|---|---------------------------------|--|------------|-----------------------|-----------------------|-----------------------|
| 36393<br>36394  | 542                             | 7646<br>7646   |            | 0                     | 0                     | 0                     |
| 36435   |                                 | 9617   |            | 0                     | 0                     | 0                     |
| 36464<br>36784  |                                 | 4085<br>2896   |            | 0                     | 1<br>0                | 0                     |
| 36797   |                                 | 2090<br>6965   |            | 0                     | 0                     | 0                     |
| 36798   |                                 | 6965   |            | 0                     | 0                     | 0                     |
| 36806   |                                 | 8310   |            | 0                     | 0                     | 0                     |
| 36822   |                                 | 5011   |            | 0                     | 0                     | 0                     |
| OOOZZ   | 001                             | 0011   |            | Ü                     | v                     | Ŭ                     |
|   | BIOPLASTY                       | ALLEGIANCE   | HEALTHCARE | BAXTER                | HEALTHCAI             | RE \                  |
| 68  | 0                               |  | 0          |                       |                       | 0                     |
| 69  | 0                               |  | 0          |                       |                       | 0                     |
| 97  | 0                               |  | 0          |                       |                       | 0                     |
| 98  | 0                               |  | 0          |                       |                       | 0                     |
| 125   | 0                               |  | 0          |                       |                       | 0                     |
| 126   | 0                               |  | 0          |                       |                       | 0                     |
| 181   | 0                               |  | 0          |                       |                       | 0                     |
| 182   | 0                               |  | 0          |                       |                       | 0                     |
| 201   | 0                               |  | 0          |                       |                       | 0                     |
| 202   | 0                               |  | 0          |                       |                       | 0                     |
| 257   | 0                               |  | 0          |                       |                       | 0                     |
| 258   | 0                               |  | 0          |                       |                       | 0                     |
| 306   | 0                               |  | 0          |                       |                       | 0                     |
| 307   | 0                               |  | 0          |                       |                       | 0                     |
| 366   | 0                               |  | 0          |                       |                       | 0                     |
| 367   | 0                               |  | 0          |                       |                       | 0                     |
| 545   | 0                               |  | 0          |                       |                       | 0                     |
| 546   | 0                               |  | 0          |                       |                       | 0                     |
| 574<br>575  | 0                               |  | 0          |                       |                       | 0                     |
| 620   | 0                               |  | 0          |                       |                       | 0                     |
| 621   | 0                               |  | 0          |                       |                       | 0                     |
| 624   | 0                               |  | 0          |                       |                       | 0                     |
| 625   | 0                               |  | 0          |                       |                       | 0                     |
| 854   | 0                               |  | 0          |                       |                       | 0                     |
| 855   | 0                               |  | 0          |                       |                       | 0                     |
| 976   | 0                               |  | 0          |                       |                       | 0                     |
| 988   | 0                               |  | 0          |                       |                       | 0                     |
| 989   | 0                               |  | 0          |                       |                       | 0                     |
| 990   | 0                               |  | 0          |                       |                       | 0                     |
|   |                                 |  |            |                       |                       |                       |

| 35798 | 0         |               |        | 0      |          | 0 |
|-------|-----------|---------------|--------|--------|----------|---|
| 35966 | 0         |               |        | 0      |          | 0 |
| 35967 | 0         |               |        | 0      |          | 0 |
| 35991 | 0         |               |        | 0      |          | 0 |
| 35992 | 0         |               |        | 0      |          | 0 |
| 36023 | 0         |               |        | 0      |          | 0 |
| 36024 | 0         |               |        | 0      |          | 0 |
| 36119 | 0         |               |        | 0      |          | 0 |
| 36123 | 0         |               |        | 0      |          | 0 |
| 36124 | 0         |               |        | 0      |          | 0 |
| 36125 | 0         |               |        | 0      |          | 0 |
| 36126 | 0         |               |        | 0      |          | 0 |
| 36143 | 0         |               |        | 0      |          | 0 |
| 36162 | 0         |               |        | 0      |          | 0 |
| 36163 | 0         |               |        | 0      |          | 0 |
| 36208 | 0         |               |        | 0      |          | 0 |
| 36249 | 0         |               |        | 0      |          | 0 |
| 36250 | 0         |               |        | 0      |          | 0 |
| 36389 | 0         |               |        | 0      |          | 0 |
| 36390 | 0         |               |        | 0      |          | 0 |
| 36392 | 0         |               |        | 0      |          | 0 |
| 36393 | 0         |               |        | 0      |          | 0 |
| 36394 | 0         |               |        | 0      |          | 0 |
| 36435 | 0         |               |        | 0      |          | 0 |
| 36464 | 0         |               |        | 0      |          | 0 |
| 36784 | 0         |               |        | 0      |          | 0 |
| 36797 | 0         |               |        | 0      |          | 0 |
| 36798 | 0         |               |        | 0      |          | 0 |
| 36806 | 0         |               |        | 0      |          | 0 |
| 36822 | 0         |               |        | 0      |          | 0 |
|       |           |               |        |        |          |   |
|       | HUTCHISON | INTERNATIONAL | POLY I | MPLANT | PROTHESE | \ |
| 68    |           | 0             |        |        | 0        |   |
| 69    |           | 0             |        |        | 0        |   |
| 97    |           | 0             |        |        | 0        |   |
| 98    |           | 0             |        |        | 0        |   |
| 125   |           | 0             |        |        | 0        |   |
| 126   |           | 0             |        |        | 0        |   |
| 181   |           | 0             |        |        | 0        |   |
| 182   |           | 0             |        |        | 0        |   |
| 201   |           | 0             |        |        | 0        |   |
| 202   |           | 0             |        |        | 0        |   |
| 257   |           | 0             |        |        | 0        |   |
| 258   |           | 0             |        |        | 0        |   |
| 306   |           | 0             |        |        | 0        |   |
| 307   |           | 0             |        |        | 0        |   |
| 366   |           | 0             |        |        | 0        |   |

| 367   | 0 | 0 |
|-------|---|---|
| 545   | 0 | 0 |
| 546   | 0 | 0 |
| 574   | 0 | 0 |
| 575   | 0 | 0 |
| 620   | 0 | 0 |
| 621   | 0 | 0 |
| 624   | 0 | 0 |
| 625   | 0 | 0 |
| 854   | 0 | 0 |
| 855   | 0 | 0 |
| 976   | 0 | 0 |
| 988   | 0 | 0 |
| 989   | 0 | 0 |
| 990   | 0 | 0 |
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| 35798 | 0 | 0 |
| 35966 | 0 | 0 |
| 35967 | 0 | 0 |
| 35991 | 0 | 0 |
| 35992 | 0 | 0 |
| 36023 | 0 | 0 |
| 36024 | 0 | 0 |
| 36119 | 0 | 0 |
| 36123 | 0 | 0 |
| 36124 | 0 | 0 |
| 36125 | 0 | 0 |
| 36126 | 0 | 0 |
| 36143 | 0 | 0 |
| 36162 | 0 | 0 |
| 36163 | 0 | 0 |
| 36208 | 0 | 0 |
| 36249 | 0 | 0 |
| 36250 | 0 | 0 |
| 36389 | 0 | 0 |
| 36390 | 0 | 0 |
| 36392 | 0 | 0 |
| 36393 | 0 | 0 |
| 36394 | 0 | 0 |
| 36435 | 0 | 0 |
| 36464 | 0 | 0 |
| 36784 | 0 | 0 |
| 36797 | 0 | 0 |
| 36798 | 0 | 0 |
| 36806 | 0 | 0 |
| 36822 | 0 | 0 |
| 00022 | U | U |

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| 68    | •••   | 0   | 0 |
|-------|-------|-----|---|
| 69    |       | 0   | 0 |
| 97    |       | 0   | 0 |
|       | •••   |     |   |
| 98    | •••   | 0   | 0 |
| 125   | •••   | 0   | 0 |
| 126   |       | 0   | 0 |
| 181   | • • • | 0   | 0 |
| 182   |       | 0   | 0 |
| 201   |       | 0   | 0 |
| 202   | •••   | 0   |   |
|       | •••   |     | 0 |
| 257   | •••   | 0   | 0 |
| 258   | •••   | 0   | 0 |
| 306   |       | 0   | 0 |
| 307   | •••   | 0   | 0 |
| 366   | •••   | 0   | 0 |
| 367   |       | 0   | 0 |
| 545   | •••   | 0   | 0 |
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| 546   | •••   | 0   | 0 |
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| 575   | •••   | 0   | 0 |
| 620   | •••   | 0   | 0 |
| 621   | •••   | 0   | 0 |
| 624   |       | 0   | 0 |
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| 854   | •••   | 0   | 0 |
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| 988   | •••   | 0   | 0 |
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| 35798 |       | 0   | 0 |
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| 35967 | •••   | 0   | 0 |
| 35991 | •••   | 0   | 0 |
| 35992 | •••   | 0   | 0 |
| 36023 | •••   | 0   | 0 |
| 36024 | •••   | 0   | 0 |
| 36119 |       | 0   | 0 |
| 36123 |       | 0   | 0 |
| 36124 | •••   | 0   | 0 |
|       | •••   |     |   |
| 36125 | •••   | 0   | 0 |
| 36126 | •••   | 0   | 0 |
| 36143 | • • • | 0   | 0 |
| 36162 |       | 0   | 0 |
| 36163 | •••   | 0   | 0 |
| 36208 |       | 1   | 0 |
| 36249 |       | 0   | 0 |
| 50210 | •••   | 0   | J |

| 36250          |            |          |           |                    | 0      |
|----------------|------------|----------|-----------|--------------------|--------|
| 36389          |            |          | • • •     |                    | 0      |
| 36390          |            |          | • • •     |                    | 0      |
| 36392          |            |          | • • •     |                    | 0      |
| 36393          |            |          | • • •     |                    | 0      |
| 36394          |            |          |           |                    | 0      |
| 36435          |            |          | • • •     |                    | 0      |
| 36464          |            |          | • • •     |                    | 0      |
| 36784          |            |          | • • •     |                    | 0      |
| 36797<br>36798 |            |          | • • •     |                    | 0<br>0 |
| 36806          |            |          | • • •     |                    | 0      |
| 36822          |            |          | •••       |                    | 0      |
| 00022          |            |          | •••       |                    | Ü      |
|                | tenderness | erythema | asymmetry | breast enlargement | \      |
| 68             | 0          | 0        | 0         | 0                  |        |
| 69             | 0          | 0        | 0         | 0                  |        |
| 97             | 0          | 0        | 0         | 0                  |        |
| 98             | 0          | 0        | 0         | 0                  |        |
| 125            | 0          | 0        | 0         | 0                  |        |
| 126            | 0          | 0        | 0         | 0                  |        |
| 181            | 0          | 0        | 0         | 0                  |        |
| 182            | 0          | 0        | 0         | 0                  |        |
| 201            | 0          | 0        | 0         | 0                  |        |
| 202            | 0          | 0        | 0         | 0                  |        |
| 257            | 0          | 0        | 0         | 0                  |        |
| 258<br>306     | 0          | 0        | 0         | 0                  |        |
| 307            | 0          | 0        | 0         | 0                  |        |
| 366            | 0          | 0        | 0         | 0                  |        |
| 367            | 0          | 0        | 0         | 0                  |        |
| 545            | 0          | 0        | 0         | 0                  |        |
| 546            | 0          | 0        | 0         | 0                  |        |
| 574            | 0          | 0        | 0         | 0                  |        |
| 575            | 0          | 0        | 0         | 0                  |        |
| 620            | 0          | 0        | 0         | 0                  |        |
| 621            | 0          | 0        | 0         | 0                  |        |
| 624            | 0          | 0        | 0         | 0                  |        |
| 625            | 0          | 0        | 0         | 0                  |        |
| 854            | 0          | 0        | 0         | 0                  |        |
| 855            | 0          | 0        | 0         | 0                  |        |
| 976            | 0          | 0        | 0         | 0                  |        |
| 988            | 0          | 0        | 0         | 0                  |        |
| 989            | 0          | 0        | 0         | 0                  |        |
| 990            | 0          | 0        | 0         | 0                  |        |
| 25700          | • • • •    |          | • • • •   | •••                |        |
| 35798          | 0          | 0        | 0         | 0                  |        |

| 35967 | 0 | 1 | 0 | 0 |
|-------|---|---|---|---|
| 35991 | 0 | 0 | 0 | 0 |
| 35992 | 0 | 0 | 0 | 0 |
| 36023 | 0 | 0 | 0 | 0 |
| 36024 | 0 | 0 | 0 | 0 |
| 36119 | 0 | 0 | 0 | 0 |
| 36123 | 0 | 1 | 0 | 0 |
| 36124 | 0 | 1 | 0 | 0 |
| 36125 | 0 | 1 | 0 | 0 |
| 36126 | 0 | 1 | 0 | 0 |
| 36143 | 0 | 0 | 0 | 0 |
| 36162 | 0 | 0 | 0 | 0 |
| 36163 | 0 | 0 | 0 | 0 |
| 36208 | 0 | 0 | 0 | 0 |
| 36249 | 0 | 0 | 0 | 0 |
| 36250 | 0 | 0 | 0 | 0 |
| 36389 | 0 | 0 | 0 | 0 |
| 36390 | 0 | 0 | 0 | 0 |
| 36392 | 0 | 0 | 0 | 0 |
| 36393 | 0 | 0 | 0 | 0 |
| 36394 | 0 | 0 | 0 | 0 |
| 36435 | 0 | 0 | 0 | 0 |
| 36464 | 0 | 0 | 0 | 0 |
| 36784 | 0 | 0 | 0 | 0 |
| 36797 | 0 | 0 | 0 | 0 |
| 36798 | 0 | 0 | 0 | 0 |
| 36806 | 0 | 0 | 0 | 0 |
| 36822 | 0 | 0 | 0 | 0 |
|       |   |   |   |   |
|       |   |   |   |   |

|     | MANUFACTURER_D_NAME         | BRAND_NAME                             | \ |
|-----|-----------------------------|--|---|
| 68  | DUPONT/ DOW CORNING/ MENTOR | BREAST IMPLANT                         |   |
| 69  | DUPONT                      | BREAST IMPLANT                         |   |
| 97  | ALLERGAN (COSTA RICA)       | UNK MAMMARY IMPLANT                    |   |
| 98  | ALLERGAN (COSTA RICA)       | UNK MAMMARY IMPLANT                    |   |
| 125 | ALLERGAN (COSTA RICA)       | UNK MAMMARY IMPLANT                    |   |
| 126 | ALLERGAN (COSTA RICA)       | UNK MAMMARY IMPLANT                    |   |
| 181 | ALLERGAN (COSTA RICA)       | STYLE 363 SALINE FILLED BREAST IMPLANT |   |
| 182 | ALLERGAN (COSTA RICA)       | STYLE 363 SALINE FILLED BREAST IMPLANT |   |
| 201 | ALLERGAN (COSTA RICA)       | UNK MAMMARY IMPLANT                    |   |
| 202 | ALLERGAN (COSTA RICA)       | UNK MAMMARY IMPLANT                    |   |
| 257 | nan                         | UNK MAMMARY IMPLANT                    |   |
| 258 | nan                         | UNK MAMMARY IMPLANT                    |   |
| 306 | ALLERGAN (COSTA RICA)       | UNK SALINE IMPLANT                     |   |
| 307 | ALLERGAN (COSTA RICA)       | UNK SALINE IMPLANT                     |   |
| 366 | UNKNOWN MANUFACTURER        | UNK MAMMARY IMPLANT                    |   |
| 367 | UNKNOWN MANUFACTURER        | UNK MAMMARY IMPLANT                    |   |
| 545 | UNKNOWN MANUFACTURER        | UNK MAMMARY IMPLANT                    |   |
| 546 | UNKNOWN MANUFACTURER        | UNK MAMMARY IMPLANT                    |   |

|       | (                                       |   |
|-------|---|---|
| 574   | ALLERGAN (COSTA RICA)                   | UNK GEL SALINE IMPLANT                    |
| 575   | ALLERGAN (COSTA RICA)                   | UNK GEL SALINE IMPLANT                    |
| 620   | ALLERGAN (COSTA RICA)                   | UNK MAMMARY IMPLANT                       |
| 621   | ALLERGAN (COSTA RICA)                   | UNK MAMMARY IMPLANT                       |
| 624   | ALLERGAN (COSTA RICA)                   | UNK MAMMARY IMPLANT                       |
| 625   | ALLERGAN (COSTA RICA)                   | UNK MAMMARY IMPLANT                       |
| 854   | UNKNOWN MANUFACTURER                    | UNK MAMMARY IMPLANT                       |
| 855   | UNKNOWN MANUFACTURER                    | UNK MAMMARY IMPLANT                       |
| 976   | MENTOR                                  | MENTOR BREAST IMPLANTS                    |
| 988   | ALLERGAN (COSTA RICA)                   | UNK SALINE IMPLANT                        |
| 989   | ALLERGAN (COSTA RICA)                   | UNK SALINE IMPLANT                        |
| 990   | ALLERGAN (COSTA RICA)                   | UNK SALINE IMPLANT                        |
|       |   | •••                                       |
| 35798 | UNKNOWN MANUFACTURER                    | UNK GEL BREAST IMPLANT                    |
| 35966 | ALLERGAN (COSTA RICA)                   | UNK SALINE IMPLANT                        |
| 35967 | ALLERGAN (COSTA RICA)                   | UNK SALINE IMPLANT                        |
| 35991 | ALLERGAN                                | MCGHAN SALINE BREAST IMPLANT HIGH PROFILE |
| 35992 | ALLERGAN                                | MCGHAN SALINE BREAST IMPLANT HIGH PROFILE |
| 36023 | UNKNOWN MANUFACTURER                    | UNK GEL BREAST IMPLANT                    |
| 36023 | UNKNOWN MANUFACTURER                    | UNK GEL BREAST IMPLANT                    |
|       | *************************************** |   |
| 36119 | MENTOR                                  | MEMORY GEL SMOOTH ROUND HIGH PROFILE      |
| 36123 | UNKNOWN MANUFACTURER                    | UNK GEL BREAST IMPLANT                    |
| 36124 | UNKNOWN MANUFACTURER                    | UNK GEL BREAST IMPLANT                    |
| 36125 | UNKNOWN MANUFACTURER                    | UNK GEL BREAST IMPLANT                    |
| 36126 | UNKNOWN MANUFACTURER                    | UNK GEL BREAST IMPLANT                    |
| 36143 | UNK                                     | SALINE BREAST IMPLANT                     |
| 36162 | UNKNOWN MANUFACTURER                    | UNK GEL BREAST IMPLANT                    |
| 36163 | UNKNOWN MANUFACTURER                    | UNK GEL BREAST IMPLANT                    |
| 36208 | ALLERGAN                                | NATRELLE SILICONE-FILLED IMPLANTS         |
| 36249 | ALLERGAN (COSTA RICA)                   | UNK SALINE IMPLANT                        |
| 36250 | ALLERGAN (COSTA RICA)                   | UNK SALINE IMPLANT                        |
| 36389 | ALLERGAN                                | EXPANDER R STYLE 150                      |
| 36390 | ALLERGAN                                | BREAST IMPLANT L STYLE 410FF              |
| 36392 | MCGHAN                                  | BREAST IMPLANT L STYLE 153                |
| 36393 | ALLERGAN                                | SALINE IMPLANT L STYLE 150                |
| 36394 | MCGHAN IMPLANTS                         | BREAST IMPLANT L STYLE 153                |
| 36435 | MENTOR                                  |   |
| 36464 | DOW CORNING / MENTOR                    | SALINE BREAST IMPLANTS                    |
| 36784 | MENTOR                                  | MENTOR SMOOTH ROUND HIGH PROFILE GEL      |
| 36797 | UNKNOWN MANUFACTURER                    | UNK GEL BREAST IMPLANT                    |
| 36798 | UNKNOWN MANUFACTURER                    | UNK GEL BREAST IMPLANT                    |
|       |   |   |
| 36806 | MENTOR                                  | SILICONE BREAST IMPLANT                   |
| 36822 | ALLERGAN, INC.                          | NATRELLE SALINE-FILLED BREAST IMPLANTS    |
|       |   | GENERIC NAME                              |
| 00    |   | GENERIC_NAME \                            |
| 68    |   | BREAST IMPLANT                            |
| 69    | DD000000000000000000000000000000000000  | BREAST IMPLANT                            |
| 97    | PROSTHESIS, BREAST, INFLATA             | BLE, INTERNAL, SALINE                     |

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PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
98
125
        PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
126
        PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
        PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
181
182
        PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
        PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
201
202
        PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
257
        PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
        PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
258
306
        PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
        PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
307
366
        PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
        PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
367
545
        PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
        PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
546
       PROSTHESIS, BREAST, NONINFLATABLE, INTERNAL, S...
574
575
       PROSTHESIS, BREAST, NONINFLATABLE, INTERNAL, S...
620
        PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
        PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
621
        PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
624
625
        PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
        PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
854
855
        PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
976
                                  MENTOR BREAST IMPLANTS
988
        PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
        PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
989
        PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
990
       PROSTHESIS, BREAST, NONINFLATABLE, INTERNAL, S...
35798
        PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
35966
        PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
35967
35991
        PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
35992
        PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
       PROSTHESIS, BREAST, NONINFLATABLE, INTERNAL, S...
36023
       PROSTHESIS, BREAST, NONINFLATABLE, INTERNAL, S...
36024
36119
                                          BREAST IMPLANTS
36123
       PROSTHESIS, BREAST, NONINFLATABLE, INTERNAL, S...
       PROSTHESIS, BREAST, NONINFLATABLE, INTERNAL, S...
36124
       PROSTHESIS, BREAST, NONINFLATABLE, INTERNAL, S...
36125
       PROSTHESIS, BREAST, NONINFLATABLE, INTERNAL, S...
36126
36143
                                   SALINE BREAST IMPLANT
       PROSTHESIS, BREAST, NONINFLATABLE, INTERNAL, S...
36162
       PROSTHESIS, BREAST, NONINFLATABLE, INTERNAL, S...
36163
36208
                       NATRELLE SILICONE-FILLED IMPLANTS
36249
        PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
36250
        PROSTHESIS, BREAST, INFLATABLE, INTERNAL, SALINE
36389
                                    EXPANDER R STYLE 150
36390
                            BREAST IMPLANT L STYLE 410FF
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| 36392<br>36393<br>36394<br>36435<br>36464<br>36784<br>36797<br>36798<br>36806<br>36822  | BREAST IMPLANT L STYLE 153 SALINE IMPLANT L STYLE 150 BREAST IMPLANT L STYLE 153 SALINE IMPLANTS WITH SILICONE SHELL SALINE BREAST IMPLANTS MENTOR SMOOTH ROUND HIGH PROFILE GEL PROSTHESIS, BREAST, NONINFLATABLE, INTERNAL, S PROSTHESIS, BREAST, NONINFLATABLE, INTERNAL, S SILICONE BREAST IMPLANT NATRELLE SALINE-FILLED BREAST IMPLANTS                                       |
|---|---|
| 68<br>69<br>97<br>98<br>125<br>126<br>181<br>182<br>201<br>202<br>257<br>258<br>306<br>307<br>366<br>367<br>545<br>546<br>574<br>575<br>620<br>621<br>624<br>625<br>854<br>855<br>976<br>988<br>989<br>990<br><br>35798<br>35966<br>35967 | THIS EVENT IS A KNOWN POTENTIAL ADVERSE EVENT HEALTH PROFESSIONAL REPORTED LEFT SIDE DEVICE I DO NOT KNOW THE EXACT DATES OFF HAND. HOWEVE HEALTHCARE PROFESSIONAL REPORTED RIGHT SIDE AL THE EVENTS OF LYMPHOMA ALCL, SEROMA, AND EDEMA THE EVENT OF LYMPHOMA IS A PHYSIOLOGICAL COMPL ARTICLE CITATION: KAPPEL RM, BOER LL, DIJKMAN THE FOLLOWING JOURNAL ARTICLE WAS REVIEWED: £ |
| 35991<br>35992  | DEFLATING LEFT BREAST IMPLANT. FOR SURGICAL RE  |

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36024 RESEARCH ARTICLE "GEL BLEED AND RUPTURE OF SIL...
         36119
               I REPLACED MY MENTOR SILICONE IMPLANTS THAT WE...
         36123 ABSTRACT OF LITERATURE ARTICLE £BREAST IMPLAN...
         36124 £BREAST IMPLANT-ASSOCIATED ANAPLASTIC LARGE C...
         36125 REPORTED EVENTS ARE ADDRESSED IN DEVICE LABELI...
         36126 ARTICLE £BREAST IMPLANT-ASSOCIATED ANAPLASTIC...
         36143 BREAST IMPLANT SILICONE SHELL HAS SECRETED CHE...
         36162 RESEARCH ARTICLE "GEL BLEED AND RUPTURE OF SIL...
         36163 ARTICLE CITATION: KAPPEL RM, BOER LL, DIJKMAN ...
         36208 I HAD GOTTEN SILICONE IMPLANTS 2 YEARS AGO ((B...
         36249 MEDWATCH SENT TO THE FDA ON 06/03/2016. LITERA...
         36250 THE FOLLOWING JOURNAL ARTICLE WAS REVIEWED: "B...
         36389 I HAD TO HAVE A DOUBLE MASTECTOMY IN 1997 AND ...
         36390 I HAD TO HAVE A DOUBLE MASTECTOMY IN 1997 AND ...
         36392 I HAD TO HAVE A DOUBLE MASTECTOMY IN 1997 AND ...
         36393 I HAD TO HAVE A DOUBLE MASTECTOMY IN 1997 AND ...
         36394 I HAD TO HAVE A DOUBLE MASTECTOMY IN 1997 AND ...
         36435 I HAD MENTOR SALINE IMPLANTS PUT IN, IN 2005. ...
         36464 AT THE AGE OF (B)(6) I HAD BREAST IMPLANTS IN...
         36784 HAD 10 YEAR SALINE IMPLANTS REMOVED AND MENTOR...
         36797 ARTICLE £Â£BREAST IMPLANT-ASSOCIATED ANAPLAST...
         36798 ARTICLE CITATION: £BREAST IMPLANT-ASSOCIATED ...
               THOUSANDS OF KNOWN WOMEN ARE SICK FROM A SILIC...
         36806
         36822 SWITCHED OUT SILICONE BREAST IMPLANTS FOR SALI...
         [1133 rows x 84 columns]
In [22]: print('Is there smooth and textured at the same time?')
         df_vector.loc[(df_vector['SMOOTH']==1) & (df_vector['TEXTURED']==1), :]
Is there smooth and textured at the same time?
Out [22]:
                MDR REPORT KEY MEDICAL ENGINEERING
                                                     DOW CORNING
                                                                  PMT
                                                                       ALLERGAN
         980
                       6567310
                                                  0
                                                               0
                                                                    0
         981
                                                  0
                                                               0
                                                                    0
                                                                               1
                       6567310
         1148
                       6572184
                                                  0
                                                                               1
         1149
                                                  0
                                                               0
                                                                    0
                                                                               1
                       6572184
         1278
                       6585642
                                                  0
                                                               0
                                                                    0
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                                                  0
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                                                                    0
                                                                               0
         2760
                       6529881
                                                  0
                                                               0
                                                                    0
         2762
                       6529881
                                                                               0
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                                                                    0
         2852
                       6584830
                                                               0
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         28508
                       996432
                                                  0
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                                                                    0
         29534
                       2162357
                                                  0
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                                                                    0
                                                                               1
                                                               0
                                                                    0
         29535
                       2162357
                                                  0
                                                                               1
                                                  0
                                                               0
                                                                    0
         29840
                       2025987
                                                                               1
                                                                    0
         29841
                       2025987
                                                  0
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(B)(4). CURRENTLY NO DEVICE DETAILS EXIST AND ...

| 29990 | 221       | 0596         |            | 0        | 0          | 0 | 1 |
|-------|-----------|--------------|------------|----------|------------|---|---|
| 29991 | 221       | 0596         |            | 0        | 0          | 0 | 1 |
| 30059 | 261       | 2780         |            | 0        | 0          | 0 | 1 |
| 30060 | 261       | 2780         |            | 0        | 0          | 0 | 1 |
| 30255 | 257       | 8247         |            | 0        | 0          | 0 | 1 |
| 30256 | 257       | 8247         |            | 0        | 0          | 0 | 1 |
| 30364 | 264       | 5572         |            | 0        | 0          | 0 | 1 |
| 30365 | 264       | 5572         |            | 0        | 0          | 0 | 1 |
| 32104 | 420       | 7226         |            | 0        | 0          | 0 | 1 |
| 35377 | 576       | 1253         |            | 0        | 0          | 0 | 1 |
| 36588 | 552       | 5702         |            | 0        | 0          | 0 | 1 |
| 36589 | 552       | 5702         |            | 0        | 0          | 0 | 1 |
|       | BIOPLASTY | ALLEGIANCE   | HEALTHCARE | BAXTER   | HEALTHCARE | \ |   |
| 980   | 0         |              | 0          |          | 0          |   |   |
| 981   | 0         |              | 0          |          | 0          |   |   |
| 1148  | 0         |              | 0          |          | 0          |   |   |
| 1149  | 0         |              | 0          |          | 0          |   |   |
| 1278  | 0         |              | 0          |          | 0          |   |   |
| 2760  | 0         |              | 0          |          | 0          |   |   |
| 2762  | 0         |              | 0          |          | 0          |   |   |
| 2852  | 0         |              | 0          |          | 0          |   |   |
| 28508 | 0         |              | 0          |          | 0          |   |   |
| 29534 | 0         |              | 0          |          | 0          |   |   |
| 29535 | 0         |              | 0          |          | 0          |   |   |
| 29840 | 0         |              | 0          |          | 0          |   |   |
| 29841 | 0         |              | 0          |          | 0          |   |   |
| 29990 | 0         |              | 0          |          | 0          |   |   |
| 29991 | 0         |              | 0          |          | 0          |   |   |
| 30059 | 0         |              | 0          |          | 0          |   |   |
| 30060 | 0         |              | 0          |          | 0          |   |   |
| 30255 | 0         |              | 0          |          | 0          |   |   |
| 30256 | 0         |              | 0          |          | 0          |   |   |
| 30364 | 0         |              | 0          |          | 0          |   |   |
| 30365 | 0         |              | 0          |          | 0          |   |   |
| 32104 | 0         |              | 0          |          | 0          |   |   |
| 35377 | 0         |              | 0          |          | 0          |   |   |
| 36588 | 0         |              | 0          |          | 0          |   |   |
| 36589 | 0         |              | 0          |          | 0          |   |   |
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| 1149  |           |              | 0          |          | 0          |   |   |
| 1278  |           |              | 0          |          | 0          |   |   |
| 2760  |           |              | 0          |          | 0          |   |   |
| 2762  |           |              | 0          |          | 0          |   |   |

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MANUFACTURER\_D\_NAME \ 980 ALLERGAN (COSTA RICA) ALLERGAN (COSTA RICA) 981 1148 ALLERGAN 1149 ALLERGAN 1278 MENTOR 2760 MCGHAN/ALLERGAN 2762 MCGHAN/ALLERGAN 2852 MENTOR 28508 29534 ALLERGAN 29535 ALLERGAN 29840 ALLERGAN 29841 ALLERGAN 29990 ALLERGAN 29991 ALLERGAN 30059 ALLERGAN 30060 ALLERGAN 30255 ALLERGAN 30256 ALLERGAN 30364 ALLERGAN 30365 ALLERGAN 32104 ALLERGAN

| 35377<br>36588<br>36589  | ALLERGAN<br>ALLERGAN<br>ALLERGAN  |
|--|---|
| 980<br>981<br>1148<br>1149<br>1278<br>2760<br>2762   | BRAND_NAME \ STYLE 410 COHESIVE SILICONE GEL FILLED BREAST  STYLE 410 COHESIVE SILICONE GEL FILLED BREAST  BREAST IMPLANT SILICONE STYLE 120 600CC  MENTOR SMOOTH ROUND PLUS STYLE, 1000 700CC  SMOOTH SALINE BREAST IMPLANTS  SALINE TEXTURED BREAST IMPLANT  SILTEX SALINE FILLED MAMMARY PROSTHESIS  |
| 2852<br>28508  | GEL BREAST IMPLANTS<br>MENTOR   |
| 29534<br>29535<br>29840<br>29841<br>29990<br>29991<br>30059<br>30255<br>30256<br>30364<br>30365<br>32104<br>35377<br>36588 | STYLE 110 SILICONE GEL FILLED BREAST IMPLANT STYLE 110 SILICONE GEL FILLED BREAST IMPLANT STYLE 20 SILICONE GEL FILLED BREAST IMPLANT STYLE 20 SILICONE GEL FILLED BREAST IMPLANT UNK MAMMARY IMPLANT UNK SALINE IMPLANT UNK SALINE IMPLANT UNK SALINE IMPLANT STYLE 468 SALINE FILLED BREAST IMPLANT STYLE 468 SALINE FILLED BREAST IMPLANT STYLE 110 SILICONE GEL FILLED BREAST IMPLANT STYLE 110 SILICONE GEL FILLED BREAST IMPLANT COHESIVE GEL BREAST IMPLANT NATRELLE TEXTURED BREAST IMPLANT |
| 36589  | NATURELLE   |
| 980<br>981<br>1148<br>1149<br>1278<br>2760<br>2762<br>2852<br>28508<br>29534   | GENERIC_NAME \ PROSTHESIS, BREAST, NONINFLATABLE, INTERNAL, S  PROSTHESIS, BREAST, NONINFLATABLE, INTERNAL, S  BREAST IMPLANT  BREAST IMPLANT  SMOOTH SALINE BREAST IMPLANTS  BREAST IMPLANTS  PROSTHESIS, BREAST  GEL BREAST IMPLANTS  SALINE BREAST IMPLANTS  nan   |
| 29535<br>29840<br>29841  | nan<br>nan<br>nan   |
| 29990  | nan   |
| 29991  | nan   |
| 30059  | nan   |

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30060
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36589
                                                 FOI_TEXT
       ARTICLE CITATION: £CD30+ T CELLS IN LATE SERO...
980
       REPORTED EVENT OF A PATIENT WITH A LEFT SIDE Â...
981
       RIGHT OPEN CAPSULECTOMY AND IMPLANT REMOVAL WI...
1148
       RIGHT OPEN CAPSULECTOMY AND IMPLANT REMOVAL WI...
1149
1278
       MENTOR COMBO GEL SILICONE/SALINE MAMMARY PROST...
2760
       I HAD A BREAST DEFORMITY AS A CHILD/TEENAGER, ...
2762
       I HAD A BREAST DEFORMITY AS A CHILD/TEENAGER, ...
2852
       APPROX 7 YEARS AGO, I HAD A BREAST AUGMENTATIO...
28508
      IN 1992, I HAD CORPORATION'S TEXTURED SALINE B...
       (B) (4). DEVICE LABELING ADDRESSES: DEVICE LABE...
29534
29535
       A REPORT OF NULL-TYPE ANAPLASTIC LARGE CELL LY...
29840
      HEALTH PROFESSIONAL INITIALLY REPORTS PATIENT ...
29841
      MEDWATCH SUBMITTED ON 03/17/2011. DEVICE LABEL...
29990
      RECEIVED ABSTRACT ENTITLED, "PRIMARY ANAPLASTI...
       DEVICE LABELING ADDRESS THE EVENT OF (B)(4): F...
29991
30059
      MEDWATCH SUBMITTED ON (B)(4) 2012. DEVICE LABE...
      HEALTHCARE PROFESSIONAL REPORTS VIA MAUDE REPO...
30060
30255
       MED WATCH SUBMITTED ON (B) (4) 2012. DEVICE LAB...
30256
      ADDITIONAL INFORMATION PROVIDED RECEIVED FROM ...
30364
      MEDWATCH SUBMITTED ON: 29/JUNE/2012. DEVICE LA...
30365
      HEALTH PROFESSIONAL REPORTED RIGHT SIDE ANAPLA...
32104
       I HAD 20 YEAR OLD MCGHAN TEXTURED SALINE IMPLA...
       I WAS DIAGNOSED WITH BREAST CANCER IN MY RIGHT...
35377
      BREAST RECONSTRUCTION PATIENT THAT HAD ALLERGA...
36588
36589
      BREAST RECONSTRUCTION PATIENT THAT HAD ALLERGA...
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[25 rows x 84 columns]

## In []: