

Tests for retrieving data from PACS

Imports

In [1]:

```
import logging
import configparser
import pandas as pd
from collections import namedtuple

from datetime import datetime as dt

from IPython.core import display as ICD

from pydicom.dataset import Dataset

from scripts.run_all import run_all
from scripts.retrieve_data_from_PACS import *

#from pynetdicom import debug_logger
#debug_logger()

# set the width of display to infinite for all pandas DataFrame
pd.set_option('display.max_colwidth', -1)
# set the level of pynetdicom module's logger to ERROR, to avoid any logs
logging.getLogger('pynetdicom').setLevel(logging.ERROR)

%load_ext autoreload
%reload_ext autoreload
%autoreload 2
```

Initialize the "config" object

In [2]:

```
config = run_all()
```

```
2019-10-30 09:20:48,842|INFO| Reading configuration
2019-10-30 09:20:48,842|INFO| Starting SchedVisu workflow
2019-10-30 09:20:48,842|INFO| Finished running SchedVisu workflow
```

Find all 'PT' and 'NM' studies for a day

In [42]:

```
df_studies = find_studies_for_day(config, config['main']['start_date'], ['PT', 'NM'])

# filter out irrelevant studies
df_studies = df_studies[df_studies['Patient ID'].str.match('^\\d+$')]
df_studies = df_studies[~df_studies['Study Description'].isin(['EXTRINSEQUE'])]
df_studies.reset_index(drop=True, inplace=True)

df_studies.iloc[:, [0,1,2,3,4,5]]
```

Out[42]:

	Study Date	Study Time	Modalities in Study	Referring Physician's Name	
1	20190807	075726	['NM', 'SR']	HVERDINGS^HESTER LAURA	
2	20190807	080143	['PT', 'OT', 'NM', 'CT', 'SR']	HAMEL^JOHN-JOHN	PET^2_F
3	20190807	083812	['PT', 'OT', 'NM', 'CT', 'SR']	ROGUELOV^CHRISTIAN	PET^2_F
4	20190807	091107	['NM', 'SR']	VENETZ^JEAN-PIERRE	
6	20190807	094007	['PT', 'CT', 'SR', 'PR']	VIALA^BENJAMIN	PET^1_Pet_FDG_CorpsEntier_Flov
7	20190807	094707	['PT', 'CT', 'SR']	DR ONCOLOGIE MEDICALE^.	
8	20190807	101340	['PT', 'CT', 'SR']	AEDO LOPEZ^VERONICA	
9	20190807	102031	['NM', 'SR']	HVERDINGS^HESTER LAURA	
10	20190807	103835	['PT', 'CT', 'SR', 'PR']	IFTICENE TREBOUX^ASSIA	PET^1_Pet_F
11	20190807	105012	['PT', 'CT', 'SR']	DR ONCOLOGIE MEDICALE^.	
12	20190807	111404	['NM', 'SR']	RIZZI^MATTIA	
13	20190807	111815	['PT', 'CT', 'SR']	DR ONCOLOGIE MEDICALE^.	PET^1_Pet_FDG_Tronc_Flow_OI
14	20190807	112059	['PT', 'CT', 'SR']	NICOD^LAURENT	
15	20190807	114432	['PT', 'CT', 'SR']	DR ONCOLOGIE MEDICALE^.	
16	20190807	115726	['NM', 'SR']	VENETZ^JEAN-PIERRE	
17	20190807	121141	['PT', 'CT', 'SR']	ZURCHER^JEAN-PHILIPPE	PET^1_Pet_F
18	20190807	122939	['PT', 'CT', 'SR']	ZURCHER^JEAN-PHILIPPE	
19	20190807	124251	['NM', 'CT', 'SR', 'PR']	KRUEGER^THORSTEN	
20	20190807	124426	['PT', 'CT', 'SR']	EHC MORGES^ONCOLOGIE	PET^1_Pet_FDG_Tronc_Flow_OI
21	20190807	130456	['PT', 'CT', 'SR']	EHC MORGES^ONCOLOGIE	
22	20190807	131115	['PT', 'CT', 'SR']	LIAPI^AIKATERINI	PET^1_Pet_F
23	20190807	134011	['NM', 'SR']	DR NEONATOLOGIE^.	
25	20190807	135252	['PT', 'OT', 'CT', 'SR']	DR PEDIATRIE^.	PET^1_PET.
26	20190807	135641	['PT', 'OT', 'NM', 'CT', 'SR']	PRIOR^JOHN	

	Study Date	Study Time	Modalities in Study	Referring Physician's Name	
27	20190807	142203	['PT', 'OT', 'CT', 'SR']	EHC MORGES^ONCOLOGIE	PET^1_Pet_F
28	20190807	142434	['NM', 'CT', 'SR']	KEFLEYESUS^AMANIEL	
29	20190807	144316	['PT', 'OT', 'CT', 'SR']	RIZZI^MATTIA	PET^1_PET_
30	20190807	145933	['PT', 'CT', 'SR']	ROGUELOV^CHRISTIAN	
32	20190807	153740	['PT', 'OT', 'CT', 'SR']	SARIVALASIS^APOSTOLOS	PET^1_Pet_F
33	20190807	154915	['PT', 'NM', 'CT', 'SR']	DICIOLLA^ANTONELLA	
34	20190807	160852	['PT', 'OT', 'NM', 'CT', 'SR']	PRIOR^JOHN	PET^2_F
35	20190807	170851	['NM', 'CT', 'SR']	LELIEVRE^LOIC	



Get all series for the found studies and get their time ranges

In [4]:

```
accepted_inst_names = ['centrehospitalieruniversitairevaudois', 'medecinenucleairechuvl  
ausanne',  
                        'radiologiechuv', 'petctchuv']  
  
# go through each study and find its series  
logging.info('Going through {} studie(s)'.format(len(df_studies)))  
for i_study in range(len(df_studies)):  
    logging.debug('DataFrame row:\n' + str(df_studies.loc[i_study, :]))  
    df_series = find_series_for_study(config, df_studies.loc[i_study, :])  
  
    # filter for the institution name  
    inst_name = df_series.loc[0, 'Institution Name'].replace(' ', ' ')  
    df_studies.loc[i_study, 'Institution Name'] = inst_name  
    if inst_name.lower().replace(' ', '') not in accepted_inst_names:  
        logging.warning('Skipping study because it is not from CHUV (institution name:  
"{}")'.format(inst_name))  
        df_studies.drop(i_study, inplace=True)  
        continue  
  
    # go through each study and find relevant information by fetching its image(s)  
    logging.info('Going through {} series'.format(len(df_series)))  
    for i_series in range(len(df_series)):  
        logging.debug('Series: ' + str(df_series.loc[i_series, :]))  
        row_info = fetch_info_for_series(config, df_series.loc[i_series, :])  
  
        # abort processing for this series no data  
        if row_info is None:  
            logging.error('Skipping series {}: no data found.'.format(df_series.loc[i_s  
eries, 'Series Instance UID']))  
            continue  
  
        # copy the relevant parameters into the main DataFrame  
        df_series.loc[i_series, 'start_time'] = row_info['start_time']  
        df_series.loc[i_series, 'end_time'] = row_info['end_time']  
        df_series.loc[i_series, 'machine'] = row_info['machine']  
  
    # remove redundant series  
    df_series = prunes_series_by_time_overlap(df_series)  
    df_series.reset_index(drop=True, inplace=True)  
  
    # create time ranges from the start/end times  
    time_ranges = []  
    for i_serie in range(len(df_series)):  
        time_ranges.append('{}-{}'.format(df_series.loc[i_serie, 'start_time'],  
                                           df_series.loc[i_serie, 'end_time']))  
  
    # propagate back the time range and machine name information  
    df_studies.loc[i_study, 'machines'] = ','.join(list(set(df_series['machine'])))  
    df_studies.loc[i_study, 'time_ranges'] = ','.join(time_ranges)  
    df_studies.loc[i_study, 'overall_time_range'] = '{}-{}'.format(  
        df_series.iloc[0]['start_time'], df_series.iloc[-1]['end_time'])
```

2019-10-30 09:21:07,215|INFO| Going through 36 studie(s)
2019-10-30 09:21:07,215|INFO| Retrieving all series for study [0]: 2.16.84
0.1.113669.632.20.1347498254.537038478.10000345938
2019-10-30 09:21:07,766|INFO| Found 1 series to exclude based on their des
cription: "Dose Report"
2019-10-30 09:21:07,766|INFO| Found 4 series to exclude based on their des
cription: "FUSION CORONALE CE", "FUSION SAGITTALE CE", "FUSION AXIALE CE",
"FUSION AXIALE pulm"
2019-10-30 09:21:07,767|INFO| Found 2 series to exclude based on their des
cription: "Images MEDRAD Intego", "Images MEDRAD Intego"
2019-10-30 09:21:07,767|WARNING| Skipping study because it is not from CHU
V (institution name: "CLINIQUE DE LA SOURCE")
2019-10-30 09:21:07,767|INFO| Retrieving all series for study [1]: 1.2.82
6.0.1.3680043.2.146.2.20.3278159.1900188906.0
2019-10-30 09:21:08,210|INFO| Found 1 series to exclude based on their des
cription: "Renal_Results"
2019-10-30 09:21:08,246|INFO| Found 1 series to exclude based on their des
cription: "KEY_IMAGES"
2019-10-30 09:21:08,246|INFO| Going through 6 series
2019-10-30 09:21:08,246|INFO| Fetching info for [0]: 20190807|081234|NM|PI
D:3278159|1.2.840....76.0
2019-10-30 09:21:09,989|INFO| Fetching info for [1]: 20190807|083440|NM|PI
D:3278159|1.2.840....78.0
2019-10-30 09:21:10,852|INFO| Fetching info for [2]: 20190807|084225|NM|PI
D:3278159|1.2.840....01.0
2019-10-30 09:21:14,144|INFO| Fetching info for [3]: 20190807|084834|NM|PI
D:3278159|1.2.840....78.0
2019-10-30 09:21:14,963|INFO| Fetching info for [4]: 20190807|085416|NM|PI
D:3278159|1.2.840....37.0
2019-10-30 09:21:16,181|INFO| Fetching info for [5]: 20190807|090557|NM|PI
D:3278159|1.2.840....54.0
2019-10-30 09:21:17,414|INFO| Pruning DataFrame for time overlap
2019-10-30 09:21:17,415|INFO| Retrieving all series for study [2]: 1.2.82
6.0.1.3680043.2.146.2.20.2613150.1900182194.0
2019-10-30 09:21:17,928|INFO| Found 1 series to exclude based on their des
cription: "PET Statistics"
2019-10-30 09:21:17,931|INFO| Found 1 series to exclude based on their des
cription: "PET Dose Report"
2019-10-30 09:21:17,935|INFO| Found 1 series to exclude based on their des
cription: "Patient Protocol"
2019-10-30 09:21:17,942|INFO| Found 12 series to exclude based on their de
scription: "4DM-ACImages", "4DM-FonctionAC+Quant", "4DM-TraitementIM", "4D
M-ImagesavecAC", "4DM-ImagesAC+Quant", "4DM-Stress PET CardioFreezeDual 8
Gates", "4DM-Stress PET Cardiac Static", "4DM-Rest PET Cardiac gated 8 Ga
tes", "4DM-Rest PET CardioFreeze dual 8 Gates", "4DM-Rest PET Cardiac St
atic", "4DM-FusionData", "4DM-Reserve"
2019-10-30 09:21:17,957|INFO| Going through 14 series
2019-10-30 09:21:17,960|INFO| Fetching info for [0]: 20190807|080546|CT|PI
D:2613150|1.3.12.2...0009
2019-10-30 09:21:19,122|INFO| Fetching info for [1]: 20190807|080647|CT|PI
D:2613150|1.3.12.2...0000
2019-10-30 09:21:20,540|INFO| Fetching info for [2]: 20190807|080918|PT|PI
D:2613150|1.3.12.2...8861
2019-10-30 09:21:21,989|INFO| Fetching info for [3]: 20190807|080918|PT|PI
D:2613150|1.3.12.2...8500
2019-10-30 09:21:22,947|INFO| Fetching info for [4]: 20190807|080918|PT|PI
D:2613150|1.3.12.2...0842
2019-10-30 09:21:23,882|INFO| Fetching info for [5]: 20190807|080918|PT|PI
D:2613150|1.3.12.2...0532
2019-10-30 09:21:24,798|INFO| Fetching info for [6]: 20190807|080918|PT|PI
D:2613150|1.3.12.2...0265

2019-10-30 09:21:25,709|INFO| Fetching info for [7]: 20190807|080918|PT|PID:2613150|1.3.12.2...6081
2019-10-30 09:21:26,713|INFO| Fetching info for [8]: 20190807|082258|PT|PID:2613150|1.3.12.2...0746
2019-10-30 09:21:27,693|INFO| Fetching info for [9]: 20190807|082258|PT|PID:2613150|1.3.12.2...8281
2019-10-30 09:21:28,576|INFO| Fetching info for [10]: 20190807|082258|PT|PID:2613150|1.3.12.2...2727
2019-10-30 09:21:29,611|INFO| Fetching info for [11]: 20190807|082258|PT|PID:2613150|1.3.12.2...7274
2019-10-30 09:21:30,472|INFO| Fetching info for [12]: 20190807|082258|PT|PID:2613150|1.3.12.2...6346
2019-10-30 09:21:31,304|INFO| Fetching info for [13]: 20190807|082258|PT|PID:2613150|1.3.12.2...6519
2019-10-30 09:21:33,241|INFO| Pruning DataFrame for time overlap
2019-10-30 09:21:33,241|INFO| 3/6: found an overlap: 081131-081131 is included in 080931-081537
2019-10-30 09:21:33,241|INFO| 3/5: found an overlap: 081132-081132 is included in 080931-081537
2019-10-30 09:21:33,242|INFO| 4/4: found an overlap: 082511-082511 is included in 082311-082917
2019-10-30 09:21:33,242|INFO| Retrieving all series for study [3]: 1.2.826.0.1.3680043.2.146.2.20.491837.1900184930.0
2019-10-30 09:21:34,567|INFO| Found 1 series to exclude based on their description: "PET Statistics"
2019-10-30 09:21:34,567|INFO| Found 3 series to exclude based on their description: "Dose Report", "Dose Report", "PET Dose Report"
2019-10-30 09:21:34,567|INFO| Found 1 series to exclude based on their description: "Patient Protocol"
2019-10-30 09:21:34,567|INFO| Found 1 series to exclude based on their description: "Processed Images COEUR"
2019-10-30 09:21:34,568|INFO| Found 28 series to exclude based on their description: "4DM-Reserve", "4DM-ImagesAC+Quant", "4DM-ImagesavecAC", "4DM-TraitementIM", "4DM-FonctionAC+Quant", "4DM-FonctionAC+Quant", "4DM-Stress PET CardioFreezeDual 8 Gates", "4DM-Stress PET Cardiac Static", "4DM-Rest PET CardioFreeze dual 8 Gates", "4DM-Rest PET Cardiac Static", "4DM-FusionData", "4DM-ACImages", "4DM-Stress PET Cardio Gated 8 Gates", "4DM-MIProcessing", "4DM-ACImages", "4DM-ACImages+Quant", "4DM-Viability", "4DM-ACFunc+Quant", "4DM-ACImages+Quant", "4DM-ACImages+Quant", "4DM-Stress PET CardioFreezeDual 8 Gates", "4DM-Stress PET Cardiac Static", "4DM-FusionData", "4DM-Stress PET Cardiac NAC Static", "4DM-Rest PET CardioFreeze dual 8 Gates", "4DM-Rest PET Cardiac Static", "4DM-Rest PET Cardiac NAC Static", "4DM-Pet FDG Centrage MAC"
2019-10-30 09:21:34,568|INFO| Found 1 series to exclude based on their description: "KEY_IMAGES"
2019-10-30 09:21:34,568|INFO| Found 1 series to exclude based on their description: "MIP COEUR"
2019-10-30 09:21:34,576|INFO| Going through 26 series
2019-10-30 09:21:34,579|INFO| Fetching info for [0]: 20190807|090159|CT|PID:491837|1.3.12.2...0093
2019-10-30 09:21:36,037|INFO| Fetching info for [1]: 20190807|090244|CT|PID:491837|1.3.12.2...0268
2019-10-30 09:21:37,979|INFO| Fetching info for [2]: 20190807|090535|PT|PID:491837|1.3.12.2...3340
2019-10-30 09:21:38,895|INFO| Fetching info for [3]: 20190807|090535|PT|PID:491837|1.3.12.2...9246
2019-10-30 09:21:39,766|INFO| Fetching info for [4]: 20190807|090535|PT|PID:491837|1.3.12.2...1227
2019-10-30 09:21:41,159|INFO| Fetching info for [5]: 20190807|090535|PT|PID:491837|1.3.12.2...3256
2019-10-30 09:21:41,999|INFO| Fetching info for [6]: 20190807|090535|PT|PID:

D:491837|1.3.12.2...4186
2019-10-30 09:21:42,828|INFO| Fetching info for [7]: 20190807|090535|PT|PID:491837|1.3.12.2...1186
2019-10-30 09:21:43,938|INFO| Fetching info for [8]: 20190807|091856|PT|PID:491837|1.3.12.2...5453
2019-10-30 09:21:44,881|INFO| Fetching info for [9]: 20190807|091856|PT|PID:491837|1.3.12.2...7566
2019-10-30 09:21:45,861|INFO| Fetching info for [10]: 20190807|091856|PT|PID:491837|1.3.12.2...9682
2019-10-30 09:21:46,869|INFO| Fetching info for [11]: 20190807|091856|PT|PID:491837|1.3.12.2...1981
2019-10-30 09:21:48,455|INFO| Fetching info for [12]: 20190807|091856|PT|PID:491837|1.3.12.2...6432
2019-10-30 09:21:49,304|INFO| Fetching info for [13]: 20190807|091856|PT|PID:491837|1.3.12.2...7529
2019-10-30 09:21:50,237|INFO| Fetching info for [14]: 20190807|145933|CT|PID:491837|1.2.840....432
2019-10-30 09:21:51,597|INFO| Fetching info for [15]: 20190807|150100|CT|PID:491837|1.2.840....35.4
2019-10-30 09:21:52,523|INFO| Fetching info for [16]: 20190807|150100|CT|PID:491837|1.2.840....435
2019-10-30 09:21:53,994|INFO| Fetching info for [17]: 20190807|150151|PT|PID:491837|1.2.840....521
2019-10-30 09:21:54,926|INFO| Fetching info for [18]: 20190807|150151|PT|PID:491837|1.2.840....522
2019-10-30 09:21:56,293|INFO| Fetching info for [19]: 20190807|150151|PT|PID:491837|1.2.840....520
2019-10-30 09:21:57,203|INFO| Fetching info for [20]: 20190807|153445|CT|PID:491837|1.2.840....528
2019-10-30 09:21:59,099|INFO| Fetching info for [21]: 20190807|153551|CT|PID:491837|1.2.840....530
2019-10-30 09:22:01,089|INFO| Fetching info for [22]: 20190807|153757|PT|PID:491837|1.2.840....581
2019-10-30 09:22:01,994|INFO| Fetching info for [23]: 20190807|153757|PT|PID:491837|1.2.840....580
2019-10-30 09:22:02,836|INFO| Fetching info for [24]: 20190807|153757|PT|PID:491837|1.2.840....579
2019-10-30 09:22:04,366|INFO| Fetching info for [25]: 20190807|153757|PT|PID:491837|1.2.840....578
2019-10-30 09:22:05,276|INFO| Pruning DataFrame for time overlap
2019-10-30 09:22:05,276|INFO| 3/12: found an overlap: 090748-090748 is included in 090548-091154
2019-10-30 09:22:05,277|INFO| 4/11: found an overlap: 092109-092109 is included in 091909-092515
2019-10-30 09:22:05,277|INFO| 7/10: found an overlap: 150151-150453 is included in 150151-150151
2019-10-30 09:22:05,280|INFO| Retrieving all series for study [4]: 1.2.826.0.1.3680043.2.146.2.20.3229908.1900188909.0
2019-10-30 09:22:05,636|INFO| Found 1 series to exclude based on their description: "Renal_Results"
2019-10-30 09:22:05,637|INFO| Found 1 series to exclude based on their description: "KEY_IMAGES"
2019-10-30 09:22:05,637|INFO| Going through 6 series
2019-10-30 09:22:05,639|INFO| Fetching info for [0]: 20190807|092704|NM|PID:3229908|1.2.840....01.0
2019-10-30 09:22:06,983|INFO| Fetching info for [1]: 20190807|094713|NM|PID:3229908|1.2.840....30.0
2019-10-30 09:22:08,527|INFO| Fetching info for [2]: 20190807|095419|NM|PID:3229908|1.2.840....05.0
2019-10-30 09:22:09,335|INFO| Fetching info for [3]: 20190807|100045|NM|PID:3229908|1.2.840....82.0

2019-10-30 09:22:10,147|INFO| Fetching info for [4]: 20190807|100510|NM|PID:3229908|1.2.840....37.0
2019-10-30 09:22:10,976|INFO| Fetching info for [5]: 20190807|101534|NM|PID:3229908|1.2.840....35.0
2019-10-30 09:22:11,808|INFO| Pruning DataFrame for time overlap
2019-10-30 09:22:11,808|INFO| Retrieving all series for study [5]: 1.2.840.113619.2.354.3.168462100.967.1565154501.19
2019-10-30 09:22:12,253|INFO| Found 1 series to exclude based on their description: "Dose Report"
2019-10-30 09:22:12,253|INFO| Found 4 series to exclude based on their description: "FUSION CORONALE CE", "FUSION SAGITTALE CE", "FUSION AXIALE CE", "FUSION AXIALE pulm"
2019-10-30 09:22:12,254|INFO| Found 2 series to exclude based on their description: "Images MEDRAD Intego", "Images MEDRAD Intego"
2019-10-30 09:22:12,254|WARNING| Skipping study because it is not from CHU V (institution name: "CLINIQUE DE LA SOURCE")
2019-10-30 09:22:12,255|INFO| Retrieving all series for study [6]: 1.2.826.0.1.3680043.2.146.2.20.2987508.1900088888.0
2019-10-30 09:22:12,997|INFO| Found 1 series to exclude based on their description: "PET Statistics"
2019-10-30 09:22:12,997|INFO| Found 1 series to exclude based on their description: "PET Dose Report"
2019-10-30 09:22:12,997|INFO| Found 2 series to exclude based on their description: "Patient Protocol", "Patient Protocol"
2019-10-30 09:22:12,997|INFO| Found 3 series to exclude based on their description: "Fusion axiale PET SUV5 Foie BH", "Fusion Axiale PET SUV5", "Fusion axiale PET Lung SUV5"
2019-10-30 09:22:12,998|INFO| Found 1 series to exclude based on their description: "MIP PET SUV5"
2019-10-30 09:22:12,998|INFO| Found 1 series to exclude based on their description: "KEY_IMAGES"
2019-10-30 09:22:12,998|INFO| Going through 17 series
2019-10-30 09:22:12,999|INFO| Fetching info for [0]: 20190807|101603|CT|PID:2987508|1.3.12.2...0177
2019-10-30 09:22:13,941|INFO| Fetching info for [1]: 20190807|101718|CT|PID:2987508|1.3.12.2...0182
2019-10-30 09:22:14,699|INFO| Fetching info for [2]: 20190807|101835|CT|PID:2987508|1.3.12.2...0536
2019-10-30 09:22:16,676|INFO| Fetching info for [3]: 20190807|102041|PT|PID:2987508|1.3.12.2...2765
2019-10-30 09:22:20,159|INFO| Fetching info for [4]: 20190807|102041|PT|PID:2987508|1.3.12.2...1668
2019-10-30 09:22:21,565|INFO| Fetching info for [5]: 20190807|102041|PT|PID:2987508|1.3.12.2...3995
2019-10-30 09:22:23,006|INFO| Fetching info for [6]: 20190807|102041|PT|PID:2987508|1.3.12.2...3364
2019-10-30 09:22:24,383|INFO| Fetching info for [7]: 20190807|102041|PT|PID:2987508|1.3.12.2...4591
2019-10-30 09:22:25,802|INFO| Fetching info for [8]: 20190807|102041|PT|PID:2987508|1.3.12.2...2516
2019-10-30 09:22:26,691|INFO| Fetching info for [9]: 20190807|102136|CT|PID:2987508|1.3.12.2...1261
2019-10-30 09:22:27,634|INFO| Fetching info for [10]: 20190807|102222|CT|PID:2987508|1.3.12.2...1986
2019-10-30 09:22:28,630|INFO| Fetching info for [11]: 20190807|103307|CT|PID:2987508|1.3.12.2...3675
2019-10-30 09:22:29,584|INFO| Fetching info for [12]: 20190807|120250|CT|PID:2987508|1.3.12.2...0907
2019-10-30 09:22:30,943|INFO| Fetching info for [13]: 20190807|120454|CT|PID:2987508|1.3.12.2...2750
2019-10-30 09:22:32,944|INFO| Fetching info for [14]: 20190807|120521|PT|P

ID:2987508|1.3.12.2...5521
2019-10-30 09:22:34,325|INFO| Fetching info for [15]: 20190807|120521|PT|P
ID:2987508|1.3.12.2...5522
2019-10-30 09:22:35,237|INFO| Fetching info for [16]: 20190807|120521|PT|P
ID:2987508|1.3.12.2...5523
2019-10-30 09:22:36,085|INFO| Pruning DataFrame for time overlap
2019-10-30 09:22:36,085|INFO| Retrieving all series for study [7]: 1.2.82
6.0.1.3680043.2.146.2.20.802228.1900122302.0
2019-10-30 09:22:36,416|INFO| Found 1 series to exclude based on their des
cription: "Dose Report"
2019-10-30 09:22:36,422|INFO| Found 2 series to exclude based on their des
cription: "Processed Images", "Processed Images LUNG"
2019-10-30 09:22:36,427|INFO| Found 1 series to exclude based on their des
cription: "KEY_IMAGES"
2019-10-30 09:22:36,430|INFO| Found 1 series to exclude based on their des
cription: "MIP"
2019-10-30 09:22:36,437|INFO| Going through 7 series
2019-10-30 09:22:36,440|INFO| Fetching info for [0]: 20190807|094707|CT|PI
D:802228|1.2.840....252
2019-10-30 09:22:40,385|INFO| Fetching info for [1]: 20190807|094858|CT|PI
D:802228|1.2.840....55.4
2019-10-30 09:22:41,340|INFO| Fetching info for [2]: 20190807|094858|CT|PI
D:802228|1.2.840....255
2019-10-30 09:22:42,702|INFO| Fetching info for [3]: 20190807|094858|CT|PI
D:802228|1.2.840....55.3
2019-10-30 09:22:44,630|INFO| Fetching info for [4]: 20190807|095051|PT|PI
D:802228|1.2.840....595
2019-10-30 09:22:45,476|INFO| Fetching info for [5]: 20190807|095051|PT|PI
D:802228|1.2.840....593
2019-10-30 09:22:46,299|INFO| Fetching info for [6]: 20190807|095051|PT|PI
D:802228|1.2.840....594
2019-10-30 09:22:47,152|INFO| Pruning DataFrame for time overlap
2019-10-30 09:22:47,152|INFO| Retrieving all series for study [8]: 1.2.82
6.0.1.3680043.2.146.2.20.794943.1900132813.0
2019-10-30 09:22:47,757|INFO| Found 1 series to exclude based on their des
cription: "Dose Report"
2019-10-30 09:22:47,757|INFO| Found 2 series to exclude based on their des
cription: "Processed Images", "Processed Images LUNG"
2019-10-30 09:22:47,757|INFO| Found 1 series to exclude based on their des
cription: "KEY_IMAGES"
2019-10-30 09:22:47,758|INFO| Found 1 series to exclude based on their des
cription: "MIP"
2019-10-30 09:22:47,758|INFO| Going through 7 series
2019-10-30 09:22:47,758|INFO| Fetching info for [0]: 20190807|101340|CT|PI
D:794943|1.2.840....602
2019-10-30 09:22:53,903|INFO| Fetching info for [1]: 20190807|101553|CT|PI
D:794943|1.2.840....05.4
2019-10-30 09:22:55,791|INFO| Fetching info for [2]: 20190807|101553|CT|PI
D:794943|1.2.840....605
2019-10-30 09:22:56,988|INFO| Fetching info for [3]: 20190807|101553|CT|PI
D:794943|1.2.840....05.3
2019-10-30 09:22:57,812|INFO| Fetching info for [4]: 20190807|101725|PT|PI
D:794943|1.2.840....01.6
2019-10-30 09:22:58,710|INFO| Fetching info for [5]: 20190807|101725|PT|PI
D:794943|1.2.840....01.5
2019-10-30 09:22:59,538|INFO| Fetching info for [6]: 20190807|101725|PT|PI
D:794943|1.2.840....01.4
2019-10-30 09:23:00,764|INFO| Pruning DataFrame for time overlap
2019-10-30 09:23:00,770|INFO| 2/3: found an overlap: 101610-101645 is inc
luded in 101610-101610
2019-10-30 09:23:00,775|INFO| Retrieving all series for study [9]: 1.2.82

6.0.1.3680043.2.146.2.20.3261643.1900188911.0
2019-10-30 09:23:01,351|INFO| Found 1 series to exclude based on their description: "Renal_Results"
2019-10-30 09:23:01,351|INFO| Found 1 series to exclude based on their description: "KEY_IMAGES"
2019-10-30 09:23:01,352|INFO| Going through 8 series
2019-10-30 09:23:01,352|INFO| Fetching info for [0]: 20190807|103209|NM|PID:3261643|1.2.840...57.0
2019-10-30 09:23:03,682|INFO| Fetching info for [1]: 20190807|105215|NM|PID:3261643|1.2.840...33.0
2019-10-30 09:23:04,477|INFO| Fetching info for [2]: 20190807|105556|NM|PID:3261643|1.2.840...64.0
2019-10-30 09:23:05,269|INFO| Fetching info for [3]: 20190807|105941|NM|PID:3261643|1.2.840...26.0
2019-10-30 09:23:06,072|INFO| Fetching info for [4]: 20190807|110844|NM|PID:3261643|1.2.840...53.0
2019-10-30 09:23:06,872|INFO| Fetching info for [5]: 20190807|112226|NM|PID:3261643|1.2.840...87.0
2019-10-30 09:23:07,726|INFO| Fetching info for [6]: 20190807|114037|NM|PID:3261643|1.2.840...58.0
2019-10-30 09:23:09,597|INFO| Fetching info for [7]: 20190807|114515|NM|PID:3261643|1.2.840...86.0
2019-10-30 09:23:10,397|INFO| Pruning DataFrame for time overlap
2019-10-30 09:23:10,420|INFO| Retrieving all series for study [10]: 1.2.826.0.1.3680043.2.146.2.20.3211253.1900133249.0
2019-10-30 09:23:10,939|INFO| Found 1 series to exclude based on their description: "PET Statistics"
2019-10-30 09:23:10,942|INFO| Found 1 series to exclude based on their description: "PET Dose Report"
2019-10-30 09:23:10,945|INFO| Found 1 series to exclude based on their description: "Patient Protocol"
2019-10-30 09:23:10,956|INFO| Found 2 series to exclude based on their description: "Fusion Axiale PET SUV5", "Fusion axiale PET Lung SUV5"
2019-10-30 09:23:10,968|INFO| Found 1 series to exclude based on their description: "MIP PET SUV5"
2019-10-30 09:23:10,975|INFO| Found 1 series to exclude based on their description: "KEY_IMAGES"
2019-10-30 09:23:10,992|INFO| Going through 8 series
2019-10-30 09:23:11,003|INFO| Fetching info for [0]: 20190807|104512|CT|PID:3211253|1.3.12.2...0400
2019-10-30 09:23:11,913|INFO| Fetching info for [1]: 20190807|104635|CT|PID:3211253|1.3.12.2...4185
2019-10-30 09:23:12,785|INFO| Fetching info for [2]: 20190807|104724|PT|PID:3211253|1.3.12.2...6751
2019-10-30 09:23:13,647|INFO| Fetching info for [3]: 20190807|104724|PT|PID:3211253|1.3.12.2...9121
2019-10-30 09:23:15,319|INFO| Fetching info for [4]: 20190807|104724|PT|PID:3211253|1.3.12.2...7855
2019-10-30 09:23:16,235|INFO| Fetching info for [5]: 20190807|105032|CT|PID:3211253|1.3.12.2...4941
2019-10-30 09:23:17,654|INFO| Fetching info for [6]: 20190807|105219|CT|PID:3211253|1.3.12.2...5697
2019-10-30 09:23:20,868|INFO| Fetching info for [7]: 20190807|105345|CT|PID:3211253|1.3.12.2...7458
2019-10-30 09:23:21,817|INFO| Pruning DataFrame for time overlap
2019-10-30 09:23:21,817|INFO| Retrieving all series for study [11]: 1.2.826.0.1.3680043.2.146.2.20.2899016.1900159861.0
2019-10-30 09:23:22,428|INFO| Found 1 series to exclude based on their description: "Dose Report"
2019-10-30 09:23:22,428|INFO| Found 2 series to exclude based on their description: "Processed Images", "Processed Images LUNG"

2019-10-30 09:23:22,428|INFO| Found 1 series to exclude based on their description: "KEY_IMAGES"

2019-10-30 09:23:22,429|INFO| Found 1 series to exclude based on their description: "MIP"

2019-10-30 09:23:22,435|INFO| Going through 7 series

2019-10-30 09:23:22,438|INFO| Fetching info for [0]: 20190807|105012|CT|PID:2899016|1.2.840....1.13

2019-10-30 09:23:24,214|INFO| Fetching info for [1]: 20190807|105208|CT|PID:2899016|1.2.840....16.4

2019-10-30 09:23:25,221|INFO| Fetching info for [2]: 20190807|105208|CT|PID:2899016|1.2.840....1.16

2019-10-30 09:23:28,269|INFO| Fetching info for [3]: 20190807|105208|CT|PID:2899016|1.2.840....16.3

2019-10-30 09:23:29,139|INFO| Fetching info for [4]: 20190807|105325|PT|PID:2899016|1.2.840....354

2019-10-30 09:23:30,016|INFO| Fetching info for [5]: 20190807|105325|PT|PID:2899016|1.2.840....355

2019-10-30 09:23:30,851|INFO| Fetching info for [6]: 20190807|105325|PT|PID:2899016|1.2.840....356

2019-10-30 09:23:31,649|INFO| Pruning DataFrame for time overlap

2019-10-30 09:23:31,659|INFO| Retrieving all series for study [12]: 1.3.12.2.1107.5.6.1.2013.31330119080711245973300000007

2019-10-30 09:23:32,334|INFO| Going through 1 series

2019-10-30 09:23:32,336|INFO| Fetching info for [0]: 20190807|111523|NM|PID:3121044|1.3.12.2...0006

2019-10-30 09:23:33,648|INFO| Pruning DataFrame for time overlap

2019-10-30 09:23:33,656|INFO| Retrieving all series for study [13]: 1.3.12.2.1107.5.1.4.10001.30000019080707014375000000006

2019-10-30 09:23:34,467|INFO| Found 1 series to exclude based on their description: "PET Statistics"

2019-10-30 09:23:34,469|INFO| Found 1 series to exclude based on their description: "PET Dose Report"

2019-10-30 09:23:34,472|INFO| Found 1 series to exclude based on their description: "Patient Protocol"

2019-10-30 09:23:34,477|INFO| Found 5 series to exclude based on their description: "Fusion axiale PET SUV5 Thorax BH", "Fusion axiale PET Lung BH SUV5", "Fusion axiale PET SUV5 Thorax", "Fusion Axiale PET SUV5", "Fusion axiale PET Lung SUV5"

2019-10-30 09:23:34,482|INFO| Found 1 series to exclude based on their description: "MIP PET SUV5"

2019-10-30 09:23:34,497|INFO| Going through 15 series

2019-10-30 09:23:34,500|INFO| Fetching info for [0]: 20190807|112751|CT|PID:2023786|1.3.12.2...0627

2019-10-30 09:23:35,509|INFO| Fetching info for [1]: 20190807|113002|CT|PID:2023786|1.3.12.2...7966

2019-10-30 09:23:36,470|INFO| Fetching info for [2]: 20190807|113200|CT|PID:2023786|1.3.12.2...8696

2019-10-30 09:23:37,438|INFO| Fetching info for [3]: 20190807|113228|CT|PID:2023786|1.3.12.2...9426

2019-10-30 09:23:38,546|INFO| Fetching info for [4]: 20190807|113402|PT|PID:2023786|1.3.12.2...1484

2019-10-30 09:23:40,263|INFO| Fetching info for [5]: 20190807|113402|PT|PID:2023786|1.3.12.2...2493

2019-10-30 09:23:41,664|INFO| Fetching info for [6]: 20190807|113402|PT|PID:2023786|1.3.12.2...5332

2019-10-30 09:23:42,555|INFO| Fetching info for [7]: 20190807|113402|PT|PID:2023786|1.3.12.2...3687

2019-10-30 09:23:43,376|INFO| Fetching info for [8]: 20190807|114641|CT|PID:2023786|1.3.12.2...1127

2019-10-30 09:23:44,248|INFO| Fetching info for [9]: 20190807|114848|CT|PID:2023786|1.3.12.2...1681

2019-10-30 09:23:45,085|INFO| Fetching info for [10]: 20190807|114858|PT|P
ID:2023786|1.3.12.2...1486
2019-10-30 09:23:45,905|INFO| Fetching info for [11]: 20190807|114858|PT|P
ID:2023786|1.3.12.2...1485
2019-10-30 09:23:46,750|INFO| Fetching info for [12]: 20190807|114858|PT|P
ID:2023786|1.3.12.2...1487
2019-10-30 09:23:47,542|INFO| Fetching info for [13]: 20190807|114925|CT|P
ID:2023786|1.3.12.2...1871
2019-10-30 09:23:48,402|INFO| Fetching info for [14]: 20190807|114943|CT|P
ID:2023786|1.3.12.2...2310
2019-10-30 09:23:49,350|INFO| Pruning DataFrame for time overlap
2019-10-30 09:23:49,361|INFO| Retrieving all series for study [14]: 1.2.82
6.0.1.3680043.2.146.2.20.798830.1900181609.0
2019-10-30 09:23:49,722|INFO| Found 1 series to exclude based on their des
cription: "Dose Report"
2019-10-30 09:23:49,729|INFO| Found 2 series to exclude based on their des
cription: "Processed Images", "Processed Images LUNG"
2019-10-30 09:23:49,737|INFO| Found 1 series to exclude based on their des
cription: "MIP"
2019-10-30 09:23:49,746|INFO| Going through 7 series
2019-10-30 09:23:49,749|INFO| Fetching info for [0]: 20190807|112059|CT|PI
D:798830|1.2.840....362
2019-10-30 09:23:53,173|INFO| Fetching info for [1]: 20190807|112225|CT|PI
D:798830|1.2.840....65.4
2019-10-30 09:23:54,160|INFO| Fetching info for [2]: 20190807|112225|CT|PI
D:798830|1.2.840....365
2019-10-30 09:23:55,056|INFO| Fetching info for [3]: 20190807|112225|CT|PI
D:798830|1.2.840....65.3
2019-10-30 09:23:55,995|INFO| Fetching info for [4]: 20190807|112406|PT|PI
D:798830|1.2.840....705
2019-10-30 09:23:56,854|INFO| Fetching info for [5]: 20190807|112406|PT|PI
D:798830|1.2.840....703
2019-10-30 09:23:58,022|INFO| Fetching info for [6]: 20190807|112406|PT|PI
D:798830|1.2.840....704
2019-10-30 09:23:58,866|INFO| Pruning DataFrame for time overlap
2019-10-30 09:23:58,866|INFO| Retrieving all series for study [15]: 1.2.82
6.0.1.3680043.2.146.2.20.650349.1900168871.0
2019-10-30 09:23:59,335|INFO| Found 1 series to exclude based on their des
cription: "Dose Report"
2019-10-30 09:23:59,342|INFO| Found 2 series to exclude based on their des
cription: "Processed Images", "Processed Images LUNG"
2019-10-30 09:23:59,349|INFO| Found 1 series to exclude based on their des
cription: "MIP"
2019-10-30 09:23:59,359|INFO| Going through 11 series
2019-10-30 09:23:59,362|INFO| Fetching info for [0]: 20190807|114432|CT|PI
D:650349|1.2.840....711
2019-10-30 09:24:00,732|INFO| Fetching info for [1]: 20190807|114711|CT|PI
D:650349|1.2.840....14.4
2019-10-30 09:24:01,719|INFO| Fetching info for [2]: 20190807|114711|CT|PI
D:650349|1.2.840....714
2019-10-30 09:24:02,566|INFO| Fetching info for [3]: 20190807|114711|CT|PI
D:650349|1.2.840....14.3
2019-10-30 09:24:03,478|INFO| Fetching info for [4]: 20190807|115157|CT|PI
D:650349|1.2.840....2.55
2019-10-30 09:24:05,161|INFO| Fetching info for [5]: 20190807|115513|CT|PI
D:650349|1.2.840....0.12
2019-10-30 09:24:06,223|INFO| Fetching info for [6]: 20190807|115513|CT|PI
D:650349|1.2.840....0.11
2019-10-30 09:24:07,646|INFO| Fetching info for [7]: 20190807|115513|CT|PI
D:650349|1.2.840....2.60
2019-10-30 09:24:08,578|INFO| Fetching info for [8]: 20190807|115644|PT|PI

D:650349|1.2.840....508
2019-10-30 09:24:10,119|INFO| Fetching info for [9]: 20190807|115644|PT|PID:650349|1.2.840....507
2019-10-30 09:24:10,961|INFO| Fetching info for [10]: 20190807|115644|PT|PID:650349|1.2.840....506
2019-10-30 09:24:11,802|INFO| Pruning DataFrame for time overlap
2019-10-30 09:24:11,813|INFO| Retrieving all series for study [16]: 1.2.826.0.1.3680043.2.146.2.20.2229451.1900188913.0
2019-10-30 09:24:12,107|INFO| Found 1 series to exclude based on their description: "Renal_Results"
2019-10-30 09:24:12,115|INFO| Found 1 series to exclude based on their description: "KEY_IMAGES"
2019-10-30 09:24:12,124|INFO| Going through 6 series
2019-10-30 09:24:12,127|INFO| Fetching info for [0]: 20190807|120459|NM|PID:2229451|1.2.840....73.0
2019-10-30 09:24:13,437|INFO| Fetching info for [1]: 20190807|122538|NM|PID:2229451|1.2.840....35.0
2019-10-30 09:24:14,190|INFO| Fetching info for [2]: 20190807|123040|NM|PID:2229451|1.2.840....87.0
2019-10-30 09:24:14,965|INFO| Fetching info for [3]: 20190807|123425|NM|PID:2229451|1.2.840....03.0
2019-10-30 09:24:15,726|INFO| Fetching info for [4]: 20190807|124051|NM|PID:2229451|1.2.840....13.0
2019-10-30 09:24:16,534|INFO| Fetching info for [5]: 20190807|124339|NM|PID:2229451|1.2.840....00.0
2019-10-30 09:24:17,317|INFO| Pruning DataFrame for time overlap
2019-10-30 09:24:17,317|INFO| Retrieving all series for study [17]: 1.2.826.0.1.3680043.2.146.2.20.167830.1900175599.0
2019-10-30 09:24:17,861|INFO| Found 1 series to exclude based on their description: "PET Statistics"
2019-10-30 09:24:17,863|INFO| Found 1 series to exclude based on their description: "PET Dose Report"
2019-10-30 09:24:17,866|INFO| Found 1 series to exclude based on their description: "Patient Protocol"
2019-10-30 09:24:17,870|INFO| Found 2 series to exclude based on their description: "Fusion Axiale PET SUV5", "Fusion axiale PET Lung SUV5"
2019-10-30 09:24:17,873|INFO| Found 1 series to exclude based on their description: "MIP PET SUV5"
2019-10-30 09:24:17,884|INFO| Going through 8 series
2019-10-30 09:24:17,886|INFO| Fetching info for [0]: 20190807|121832|CT|PID:167830|1.3.12.2...0975
2019-10-30 09:24:18,733|INFO| Fetching info for [1]: 20190807|122006|CT|PID:167830|1.3.12.2...3130
2019-10-30 09:24:21,009|INFO| Fetching info for [2]: 20190807|122043|PT|PID:167830|1.3.12.2...8985
2019-10-30 09:24:22,028|INFO| Fetching info for [3]: 20190807|122043|PT|PID:167830|1.3.12.2...0171
2019-10-30 09:24:22,965|INFO| Fetching info for [4]: 20190807|122043|PT|PID:167830|1.3.12.2...1537
2019-10-30 09:24:24,439|INFO| Fetching info for [5]: 20190807|122451|CT|PID:167830|1.3.12.2...4039
2019-10-30 09:24:25,374|INFO| Fetching info for [6]: 20190807|122705|CT|PID:167830|1.3.12.2...4948
2019-10-30 09:24:26,395|INFO| Fetching info for [7]: 20190807|123615|CT|PID:167830|1.3.12.2...7066
2019-10-30 09:24:27,308|INFO| Pruning DataFrame for time overlap
2019-10-30 09:24:27,316|INFO| Retrieving all series for study [18]: 1.2.826.0.1.3680043.2.146.2.20.2806473.1900182819.0
2019-10-30 09:24:27,659|INFO| Found 1 series to exclude based on their description: "Dose Report"
2019-10-30 09:24:27,664|INFO| Found 2 series to exclude based on their des

cription: "DefaultSeries", "DefaultSeries"
2019-10-30 09:24:27,666|INFO| Found 2 series to exclude based on their description: "Results MM Oncology Reading", "Results MM Oncology Reading"
2019-10-30 09:24:27,670|INFO| Found 2 series to exclude based on their description: "Processed Images", "Processed Images LUNG"
2019-10-30 09:24:27,676|INFO| Found 1 series to exclude based on their description: "KEY_IMAGES"
2019-10-30 09:24:27,680|INFO| Found 1 series to exclude based on their description: "MIP"
2019-10-30 09:24:27,689|INFO| Going through 7 series
2019-10-30 09:24:27,692|INFO| Fetching info for [0]: 20190807|122939|CT|PID:2806473|1.2.840....514
2019-10-30 09:24:29,450|INFO| Fetching info for [1]: 20190807|123220|CT|PID:2806473|1.2.840....18.4
2019-10-30 09:24:30,362|INFO| Fetching info for [2]: 20190807|123220|CT|PID:2806473|1.2.840....18.3
2019-10-30 09:24:31,698|INFO| Fetching info for [3]: 20190807|123220|CT|PID:2806473|1.2.840....518
2019-10-30 09:24:32,565|INFO| Fetching info for [4]: 20190807|123346|PT|PID:2806473|1.2.840....965
2019-10-30 09:24:33,695|INFO| Fetching info for [5]: 20190807|123346|PT|PID:2806473|1.2.840....966
2019-10-30 09:24:34,783|INFO| Fetching info for [6]: 20190807|123346|PT|PID:2806473|1.2.840....964
2019-10-30 09:24:36,169|INFO| Pruning DataFrame for time overlap
2019-10-30 09:24:36,169|INFO| Retrieving all series for study [19]: 1.2.826.0.1.3680043.2.146.2.20.3129603.1900183481.0
2019-10-30 09:24:36,454|INFO| Found 1 series to exclude based on their description: "Patient Protocol"
2019-10-30 09:24:36,458|INFO| Found 3 series to exclude based on their description: "Fusion - Sagittals", "Fusion - Transaxials", "Fusion - Coronal s"
2019-10-30 09:24:36,465|INFO| Found 1 series to exclude based on their description: "KEY_IMAGES"
2019-10-30 09:24:36,475|INFO| Going through 9 series
2019-10-30 09:24:36,477|INFO| Fetching info for [0]: 20190807|125054|NM|PID:3129603|1.3.12.2...0001
2019-10-30 09:24:37,656|INFO| Fetching info for [1]: 20190807|125313|NM|PID:3129603|1.3.12.2...0006
2019-10-30 09:24:38,932|INFO| Fetching info for [2]: 20190807|132616|NM|PID:3129603|1.3.12.2...0001
2019-10-30 09:24:40,245|INFO| Fetching info for [3]: 20190807|133518|CT|PID:3129603|1.3.12.2...0007
2019-10-30 09:24:41,371|INFO| Fetching info for [4]: 20190807|133610|CT|PID:3129603|1.3.12.2...0003
2019-10-30 09:24:42,252|INFO| Fetching info for [5]: 20190807|133647|CT|PID:3129603|1.3.12.2...0000
2019-10-30 09:24:45,039|INFO| Fetching info for [6]: 20190807|133706|CT|PID:3129603|1.3.12.2...0304
2019-10-30 09:24:47,306|INFO| Fetching info for [7]: 20190807|134103|NM|PID:3129603|1.3.12.2...0009
2019-10-30 09:24:48,593|INFO| Fetching info for [8]: 20190807|134111|NM|PID:3129603|1.3.12.2...0012
2019-10-30 09:24:49,372|INFO| Pruning DataFrame for time overlap
2019-10-30 09:24:49,381|INFO| Retrieving all series for study [20]: 1.2.826.0.1.3680043.2.146.2.20.988558.1900175286.0
2019-10-30 09:24:49,840|INFO| Found 1 series to exclude based on their description: "PET Statistics"
2019-10-30 09:24:49,842|INFO| Found 1 series to exclude based on their description: "PET Dose Report"
2019-10-30 09:24:49,845|INFO| Found 1 series to exclude based on their des

cription: "Patient Protocol"

2019-10-30 09:24:49,850|INFO| Found 5 series to exclude based on their description: "Fusion Axiale PET SUV5", "Fusion axiale PET Lung SUV5", "Fusion axiale PET SUV5 Thorax BH", "Fusion axiale PET Lung BH SUV5", "Fusion axiale PET SUV5 Thorax BH"

2019-10-30 09:24:49,854|INFO| Found 1 series to exclude based on their description: "MIP PET SUV5"

2019-10-30 09:24:49,865|INFO| Going through 15 series

2019-10-30 09:24:49,872|INFO| Fetching info for [0]: 20190807|125017|CT|PID:988558|1.3.12.2...1244

2019-10-30 09:24:50,979|INFO| Fetching info for [1]: 20190807|125255|CT|PID:988558|1.3.12.2...7511

2019-10-30 09:24:51,938|INFO| Fetching info for [2]: 20190807|125323|PT|PID:988558|1.3.12.2...7090

2019-10-30 09:24:52,953|INFO| Fetching info for [3]: 20190807|125323|PT|PID:988558|1.3.12.2...6106

2019-10-30 09:24:53,813|INFO| Fetching info for [4]: 20190807|125323|PT|PID:988558|1.3.12.2...0035

2019-10-30 09:24:54,709|INFO| Fetching info for [5]: 20190807|125323|PT|PID:988558|1.3.12.2...8432

2019-10-30 09:24:55,586|INFO| Fetching info for [6]: 20190807|125455|CT|PID:988558|1.3.12.2...8220

2019-10-30 09:24:56,461|INFO| Fetching info for [7]: 20190807|125521|CT|PID:988558|1.3.12.2...8929

2019-10-30 09:24:57,443|INFO| Fetching info for [8]: 20190807|130540|CT|PID:988558|1.3.12.2...0580

2019-10-30 09:25:00,284|INFO| Fetching info for [9]: 20190807|130702|CT|PID:988558|1.3.12.2...1031

2019-10-30 09:25:02,404|INFO| Fetching info for [10]: 20190807|130711|PT|PID:988558|1.3.12.2...6107

2019-10-30 09:25:03,724|INFO| Fetching info for [11]: 20190807|130711|PT|PID:988558|1.3.12.2...6109

2019-10-30 09:25:04,541|INFO| Fetching info for [12]: 20190807|130711|PT|PID:988558|1.3.12.2...6108

2019-10-30 09:25:05,382|INFO| Fetching info for [13]: 20190807|130739|CT|PID:988558|1.3.12.2...1221

2019-10-30 09:25:06,338|INFO| Fetching info for [14]: 20190807|130758|CT|PID:988558|1.3.12.2...1660

2019-10-30 09:25:07,250|INFO| Pruning DataFrame for time overlap

2019-10-30 09:25:07,263|INFO| Retrieving all series for study [21]: 1.2.826.0.1.3680043.2.146.2.20.2988596.1900175278.0

2019-10-30 09:25:07,564|INFO| Found 1 series to exclude based on their description: "Dose Report"

2019-10-30 09:25:07,568|INFO| Found 1 series to exclude based on their description: "DefaultSeries"

2019-10-30 09:25:07,572|INFO| Found 2 series to exclude based on their description: "Processed Images", "Processed Images LUNG"

2019-10-30 09:25:07,579|INFO| Found 1 series to exclude based on their description: "KEY_IMAGES"

2019-10-30 09:25:07,582|INFO| Found 1 series to exclude based on their description: "MIP"

2019-10-30 09:25:07,592|INFO| Going through 7 series

2019-10-30 09:25:07,597|INFO| Fetching info for [0]: 20190807|130456|CT|PID:2988596|1.2.840....972

2019-10-30 09:25:08,972|INFO| Fetching info for [1]: 20190807|130624|CT|PID:2988596|1.2.840....75.4

2019-10-30 09:25:10,659|INFO| Fetching info for [2]: 20190807|130624|CT|PID:2988596|1.2.840....75.3

2019-10-30 09:25:11,549|INFO| Fetching info for [3]: 20190807|130624|CT|PID:2988596|1.2.840....975

2019-10-30 09:25:12,448|INFO| Fetching info for [4]: 20190807|130756|PT|PI

D:2988596|1.2.840....314
2019-10-30 09:25:13,346|INFO| Fetching info for [5]: 20190807|130756|PT|PID:2988596|1.2.840....313
2019-10-30 09:25:14,193|INFO| Fetching info for [6]: 20190807|130756|PT|PID:2988596|1.2.840....315
2019-10-30 09:25:15,046|INFO| Pruning DataFrame for time overlap
2019-10-30 09:25:15,078|INFO| Retrieving all series for study [22]: 1.2.826.0.1.3680043.2.146.2.20.3069530.1900175854.0
2019-10-30 09:25:15,512|INFO| Found 1 series to exclude based on their description: "PET Statistics"
2019-10-30 09:25:15,514|INFO| Found 1 series to exclude based on their description: "PET Dose Report"
2019-10-30 09:25:15,517|INFO| Found 1 series to exclude based on their description: "Patient Protocol"
2019-10-30 09:25:15,519|INFO| Found 1 series to exclude based on their description: "DefaultSeries"
2019-10-30 09:25:15,521|INFO| Found 2 series to exclude based on their description: "Results MM Oncology Reading", "Results MM Oncology Reading"
2019-10-30 09:25:15,526|INFO| Found 2 series to exclude based on their description: "Fusion Axiale PET SUV5", "Fusion axiale PET Lung SUV5"
2019-10-30 09:25:15,531|INFO| Found 1 series to exclude based on their description: "MIP PET SUV5"
2019-10-30 09:25:15,535|INFO| Found 1 series to exclude based on their description: "KEY_IMAGES"
2019-10-30 09:25:15,546|INFO| Going through 8 series
2019-10-30 09:25:15,552|INFO| Fetching info for [0]: 20190807|133409|CT|PID:3069530|1.3.12.2...1518
2019-10-30 09:25:16,469|INFO| Fetching info for [1]: 20190807|133542|CT|PID:3069530|1.3.12.2...2099
2019-10-30 09:25:18,207|INFO| Fetching info for [2]: 20190807|133601|PT|PID:3069530|1.3.12.2...4771
2019-10-30 09:25:19,114|INFO| Fetching info for [3]: 20190807|133601|PT|PID:3069530|1.3.12.2...3500
2019-10-30 09:25:20,042|INFO| Fetching info for [4]: 20190807|133601|PT|PID:3069530|1.3.12.2...2391
2019-10-30 09:25:20,963|INFO| Fetching info for [5]: 20190807|133940|CT|PID:3069530|1.3.12.2...2858
2019-10-30 09:25:21,898|INFO| Fetching info for [6]: 20190807|134130|CT|PID:3069530|1.3.12.2...3617
2019-10-30 09:25:22,918|INFO| Fetching info for [7]: 20190807|134931|CT|PID:3069530|1.3.12.2...5385
2019-10-30 09:25:23,789|INFO| Pruning DataFrame for time overlap
2019-10-30 09:25:23,797|INFO| Retrieving all series for study [23]: 1.2.826.0.1.3680043.2.146.2.20.3274879.1900188915.0
2019-10-30 09:25:24,176|INFO| Found 1 series to exclude based on their description: "Renal_Results"
2019-10-30 09:25:24,186|INFO| Found 1 series to exclude based on their description: "KEY_IMAGES"
2019-10-30 09:25:24,187|INFO| Going through 6 series
2019-10-30 09:25:24,187|INFO| Fetching info for [0]: 20190807|141915|NM|PID:3274879|1.2.840....83.0
2019-10-30 09:25:25,494|INFO| Fetching info for [1]: 20190807|144149|NM|PID:3274879|1.2.840....58.0
2019-10-30 09:25:26,625|INFO| Fetching info for [2]: 20190807|144353|NM|PID:3274879|1.2.840....31.0
2019-10-30 09:25:27,418|INFO| Fetching info for [3]: 20190807|145932|NM|PID:3274879|1.2.840....27.0
2019-10-30 09:25:28,198|INFO| Fetching info for [4]: 20190807|150245|NM|PID:3274879|1.2.840....94.0
2019-10-30 09:25:28,998|INFO| Fetching info for [5]: 20190807|151040|NM|PID:3274879|1.2.840....08.0

2019-10-30 09:25:29,776|INFO| Pruning DataFrame for time overlap
2019-10-30 09:25:29,786|INFO| Retrieving all series for study [24]: 1.2.27
6.0.37.1.315.201505.10655425
2019-10-30 09:25:30,078|INFO| Found 1 series to exclude based on their des
cription: "Patient Protocol"
2019-10-30 09:25:30,085|INFO| Found 1 series to exclude based on their des
cription: "SAVE_SCREEN"
2019-10-30 09:25:30,089|INFO| Found 6 series to exclude based on their des
cription: "FUSED COR", "FUSED SAG", "FUSED AX", "FUSED AX", "FUSED COR",
"FUSED SAG"
2019-10-30 09:25:30,099|WARNING| Skipping study because it is not from CHU
V (institution name: "Hopital de Sion")
2019-10-30 09:25:30,105|INFO| Retrieving all series for study [25]: 1.2.82
6.0.1.3680043.2.146.2.20.2898026.1900179486.0
2019-10-30 09:25:30,438|INFO| Found 1 series to exclude based on their des
cription: "PET Statistics"
2019-10-30 09:25:30,440|INFO| Found 1 series to exclude based on their des
cription: "PET Dose Report"
2019-10-30 09:25:30,443|INFO| Found 1 series to exclude based on their des
cription: "Patient Protocol"
2019-10-30 09:25:30,446|INFO| Found 2 series to exclude based on their des
cription: "Fusion Axiale PET", "Fusion axiale PET Lung SUV5"
2019-10-30 09:25:30,452|INFO| Found 1 series to exclude based on their des
cription: "MIP PET Corps entier SUV5"
2019-10-30 09:25:30,466|INFO| Going through 8 series
2019-10-30 09:25:30,471|INFO| Fetching info for [0]: 20190807|140307|CT|PI
D:2898026|1.3.12.2...1746
2019-10-30 09:25:31,415|INFO| Fetching info for [1]: 20190807|140430|CT|PI
D:2898026|1.3.12.2...5956
2019-10-30 09:25:32,379|INFO| Fetching info for [2]: 20190807|140513|PT|PI
D:2898026|1.3.12.2...6846
2019-10-30 09:25:33,314|INFO| Fetching info for [3]: 20190807|140513|PT|PI
D:2898026|1.3.12.2...9608
2019-10-30 09:25:34,641|INFO| Fetching info for [4]: 20190807|140513|PT|PI
D:2898026|1.3.12.2...8197
2019-10-30 09:25:35,470|INFO| Fetching info for [5]: 20190807|140513|PT|PI
D:2898026|1.3.12.2...4775
2019-10-30 09:25:36,324|INFO| Fetching info for [6]: 20190807|140732|CT|PI
D:2898026|1.3.12.2...6753
2019-10-30 09:25:37,262|INFO| Fetching info for [7]: 20190807|140815|CT|PI
D:2898026|1.3.12.2...7748
2019-10-30 09:25:38,188|INFO| Pruning DataFrame for time overlap
2019-10-30 09:25:38,203|INFO| Retrieving all series for study [26]: 1.2.82
6.0.1.3680043.2.146.2.20.2187153.1900189293.0
2019-10-30 09:25:38,581|INFO| Found 1 series to exclude based on their des
cription: "Dose Report"
2019-10-30 09:25:38,589|INFO| Found 13 series to exclude based on their de
scription: "4DM-+SRest Gated Recon MAC", "4DM-ACFunc+Quant", "4DM-+SSStress
Gated Recon MAC", "4DM-+SSStress Static 6min Recon MAC", "4DM-+SRest Static
6min Recon MAC", "4DM-FusionData", "4DM-+SRest Static 6min Recon MAC", "4D
M-MIPProcessing", "4DM-ACImages", "4DM-ACImages+Quant", "4DM-+SSStress Stati
c 6min Recon MAC", "4DM-+SRest Dynamic Recon MAC", "4DM-FusionData"
2019-10-30 09:25:38,594|INFO| Found 1 series to exclude based on their des
cription: "KEY_IMAGES"
2019-10-30 09:25:38,604|INFO| Going through 9 series
2019-10-30 09:25:38,607|INFO| Fetching info for [0]: 20190807|135641|CT|PI
D:2187153|1.2.840....321
2019-10-30 09:25:39,496|INFO| Fetching info for [1]: 20190807|135757|CT|PI
D:2187153|1.2.840....323
2019-10-30 09:25:40,325|INFO| Fetching info for [2]: 20190807|140208|PT|PI
D:2187153|1.2.840....592

2019-10-30 09:25:41,144|INFO| Fetching info for [3]: 20190807|140208|PT|PID:2187153|1.2.840....590
2019-10-30 09:25:42,683|INFO| Fetching info for [4]: 20190807|140208|PT|PID:2187153|1.2.840....591
2019-10-30 09:25:44,059|INFO| Fetching info for [5]: 20190807|141827|PT|PID:2187153|1.2.840....596
2019-10-30 09:25:44,882|INFO| Fetching info for [6]: 20190807|141827|PT|PID:2187153|1.2.840....594
2019-10-30 09:25:45,699|INFO| Fetching info for [7]: 20190807|141827|PT|PID:2187153|1.2.840....595
2019-10-30 09:25:46,595|INFO| Fetching info for [8]: 20190807|142751|CT|PID:2187153|1.2.840....378
2019-10-30 09:25:47,482|INFO| Pruning DataFrame for time overlap
2019-10-30 09:25:47,482|INFO| 3/6: found an overlap: 140421-140421 is included in 140221-140827
2019-10-30 09:25:47,483|INFO| 4/5: found an overlap: 142040-142040 is included in 141840-142446
2019-10-30 09:25:47,483|INFO| Retrieving all series for study [27]: 1.2.826.0.1.3680043.2.146.2.20.790797.1900184077.0
2019-10-30 09:25:47,991|INFO| Found 1 series to exclude based on their description: "PET Statistics"
2019-10-30 09:25:47,991|INFO| Found 1 series to exclude based on their description: "PET Dose Report"
2019-10-30 09:25:47,991|INFO| Found 1 series to exclude based on their description: "Patient Protocol"
2019-10-30 09:25:47,991|INFO| Found 2 series to exclude based on their description: "Fusion Axiale PET SUV5", "Fusion axiale PET Lung SUV5"
2019-10-30 09:25:47,992|INFO| Found 1 series to exclude based on their description: "MIP PET SUV5"
2019-10-30 09:25:47,992|INFO| Going through 8 series
2019-10-30 09:25:47,992|INFO| Fetching info for [0]: 20190807|142812|CT|PID:790797|1.3.12.2...2079
2019-10-30 09:25:48,867|INFO| Fetching info for [1]: 20190807|142936|CT|PID:790797|1.3.12.2...8156
2019-10-30 09:25:50,545|INFO| Fetching info for [2]: 20190807|143032|PT|PID:790797|1.3.12.2...9911
2019-10-30 09:25:51,441|INFO| Fetching info for [3]: 20190807|143032|PT|PID:790797|1.3.12.2...9910
2019-10-30 09:25:52,368|INFO| Fetching info for [4]: 20190807|143032|PT|PID:790797|1.3.12.2...9909
2019-10-30 09:25:53,241|INFO| Fetching info for [5]: 20190807|143312|CT|PID:790797|1.3.12.2...8846
2019-10-30 09:25:54,242|INFO| Fetching info for [6]: 20190807|143451|CT|PID:790797|1.3.12.2...9536
2019-10-30 09:25:55,660|INFO| Fetching info for [7]: 20190807|143613|CT|PID:790797|1.3.12.2...1144
2019-10-30 09:25:56,605|INFO| Pruning DataFrame for time overlap
2019-10-30 09:25:56,617|INFO| Retrieving all series for study [28]: 1.2.826.0.1.3680043.2.146.2.20.638459.1900185972.0
2019-10-30 09:25:56,932|INFO| Found 1 series to exclude based on their description: "Patient Protocol"
2019-10-30 09:25:56,935|INFO| Found 2 series to exclude based on their description: "Results MM Oncology Reading", "Results MM Oncology Reading"
2019-10-30 09:25:56,937|INFO| Found 1 series to exclude based on their description: "FUSION AXIALES"
2019-10-30 09:25:56,943|INFO| Found 2 series to exclude based on their description: "KEY_IMAGES", "KEY_IMAGES"
2019-10-30 09:25:56,955|INFO| Going through 9 series
2019-10-30 09:25:56,958|INFO| Fetching info for [0]: 20190807|144219|NM|PID:638459|1.3.12.2...0004
2019-10-30 09:25:57,797|INFO| Fetching info for [1]: 20190807|145735|NM|PI

D:638459|1.3.12.2...0007
2019-10-30 09:25:58,989|INFO| Fetching info for [2]: 20190807|151104|NM|PID:638459|1.3.12.2...0004
2019-10-30 09:26:00,342|INFO| Fetching info for [3]: 20190807|152816|CT|PID:638459|1.3.12.2...0007
2019-10-30 09:26:01,146|INFO| Fetching info for [4]: 20190807|152950|CT|PID:638459|1.3.12.2...0074
2019-10-30 09:26:02,039|INFO| Fetching info for [5]: 20190807|153028|CT|PID:638459|1.3.12.2...0608
2019-10-30 09:26:02,947|INFO| Fetching info for [6]: 20190807|153047|CT|PID:638459|1.3.12.2...0921
2019-10-30 09:26:03,854|INFO| Fetching info for [7]: 20190807|153234|NM|PID:638459|1.3.12.2...0009
2019-10-30 09:26:04,673|INFO| Fetching info for [8]: 20190807|153242|NM|PID:638459|1.3.12.2...0012
2019-10-30 09:26:06,162|INFO| Pruning DataFrame for time overlap
2019-10-30 09:26:06,162|INFO| Retrieving all series for study [29]: 1.2.826.0.1.3680043.2.146.2.20.3137265.1900189007.0
2019-10-30 09:26:06,740|INFO| Found 1 series to exclude based on their description: "PET Statistics"
2019-10-30 09:26:06,740|INFO| Found 1 series to exclude based on their description: "Patient Protocol"
2019-10-30 09:26:06,740|INFO| Found 2 series to exclude based on their description: "Fusion axiale PET Corps entier SUV5", "Fusion axiale PET Lung SUV5"
2019-10-30 09:26:06,740|INFO| Found 1 series to exclude based on their description: "MIP PET Corps entier SUV5"
2019-10-30 09:26:06,751|INFO| Going through 8 series
2019-10-30 09:26:06,754|INFO| Fetching info for [0]: 20190807|151935|CT|PID:3137265|1.3.12.2...2287
2019-10-30 09:26:07,641|INFO| Fetching info for [1]: 20190807|152042|CT|PID:3137265|1.3.12.2...1596
2019-10-30 09:26:08,538|INFO| Fetching info for [2]: 20190807|152057|PT|PID:3137265|1.3.12.2...2414
2019-10-30 09:26:09,832|INFO| Fetching info for [3]: 20190807|152057|PT|PID:3137265|1.3.12.2...4755
2019-10-30 09:26:10,767|INFO| Fetching info for [4]: 20190807|152057|PT|PID:3137265|1.3.12.2...5642
2019-10-30 09:26:11,993|INFO| Fetching info for [5]: 20190807|152057|PT|PID:3137265|1.3.12.2...4039
2019-10-30 09:26:12,874|INFO| Fetching info for [6]: 20190807|152245|CT|PID:3137265|1.3.12.2...2126
2019-10-30 09:26:13,818|INFO| Fetching info for [7]: 20190807|153556|CT|PID:3137265|1.3.12.2...2788
2019-10-30 09:26:15,206|INFO| Pruning DataFrame for time overlap
2019-10-30 09:26:15,215|INFO| Retrieving all series for study [30]: 1.2.826.0.1.3680043.2.146.2.20.491837.1900189770.0
2019-10-30 09:26:15,740|INFO| Found 1 series to exclude based on their description: "PET Statistics"
2019-10-30 09:26:15,742|INFO| Found 3 series to exclude based on their description: "Dose Report", "Dose Report", "PET Dose Report"
2019-10-30 09:26:15,745|INFO| Found 1 series to exclude based on their description: "Patient Protocol"
2019-10-30 09:26:15,750|INFO| Found 1 series to exclude based on their description: "Processed Images COEUR"
2019-10-30 09:26:15,752|INFO| Found 28 series to exclude based on their description: "4DM-Reserve", "4DM-ImagesAC+Quant", "4DM-ImagesavecAC", "4DM-raitementIM", "4DM-FonctionAC+Quant", "4DM-FonctionAC+Quant", "4DM-Stress PET CardioFreezeDual 8 Gates", "4DM-Stress PET Cardiac Static", "4DM-Rest PET CardioFreeze dual 8 Gates", "4DM-Rest PET Cardiac Static", "4DM-FusionData", "4DM-ACImages", "4DM-MIPprocessing", "4DM-ACImages", "4DM-ACImages+

Quant", "4DM-Viability", "4DM-ACFunc+Quant", "4DM-ACImages+Quant", "4DM-AC
Images+Quant", "4DM-Stress PET CardioFreezeDual 8 Gates", "4DM-Stress PET
Cardio Gated 8 Gates", "4DM-Stress PET Cardiac Static", "4DM-Stress PET Ca
rdiac NAC Static", "4DM-Rest PET CardioFreeze dual 8 Gates", "4DM-Rest P
ET Cardiac Static", "4DM-Rest PET Cardiac NAC Static", "4DM-FusionData",
"4DM-Pet FDG Centrage MAC"

2019-10-30 09:26:15,759|INFO| Found 1 series to exclude based on their des
cription: "KEY_IMAGES"

2019-10-30 09:26:15,762|INFO| Found 1 series to exclude based on their des
cription: "MIP COEUR"

2019-10-30 09:26:15,770|INFO| Going through 26 series

2019-10-30 09:26:15,775|INFO| Fetching info for [0]: 20190807|090159|CT|PI
D:491837|1.3.12.2...0093

2019-10-30 09:26:16,562|INFO| Fetching info for [1]: 20190807|090244|CT|PI
D:491837|1.3.12.2...0268

2019-10-30 09:26:17,364|INFO| Fetching info for [2]: 20190807|090535|PT|PI
D:491837|1.3.12.2...3340

2019-10-30 09:26:18,170|INFO| Fetching info for [3]: 20190807|090535|PT|PI
D:491837|1.3.12.2...9246

2019-10-30 09:26:18,958|INFO| Fetching info for [4]: 20190807|090535|PT|PI
D:491837|1.3.12.2...1227

2019-10-30 09:26:20,440|INFO| Fetching info for [5]: 20190807|090535|PT|PI
D:491837|1.3.12.2...3256

2019-10-30 09:26:21,261|INFO| Fetching info for [6]: 20190807|090535|PT|PI
D:491837|1.3.12.2...4186

2019-10-30 09:26:22,026|INFO| Fetching info for [7]: 20190807|090535|PT|PI
D:491837|1.3.12.2...1186

2019-10-30 09:26:22,787|INFO| Fetching info for [8]: 20190807|091856|PT|PI
D:491837|1.3.12.2...5453

2019-10-30 09:26:23,560|INFO| Fetching info for [9]: 20190807|091856|PT|PI
D:491837|1.3.12.2...7566

2019-10-30 09:26:24,339|INFO| Fetching info for [10]: 20190807|091856|PT|P
ID:491837|1.3.12.2...9682

2019-10-30 09:26:25,113|INFO| Fetching info for [11]: 20190807|091856|PT|P
ID:491837|1.3.12.2...1981

2019-10-30 09:26:25,913|INFO| Fetching info for [12]: 20190807|091856|PT|P
ID:491837|1.3.12.2...6432

2019-10-30 09:26:26,710|INFO| Fetching info for [13]: 20190807|091856|PT|P
ID:491837|1.3.12.2...7529

2019-10-30 09:26:29,780|INFO| Fetching info for [14]: 20190807|145933|CT|P
ID:491837|1.2.840....432

2019-10-30 09:26:30,664|INFO| Fetching info for [15]: 20190807|150100|CT|P
ID:491837|1.2.840....35.4

2019-10-30 09:26:31,575|INFO| Fetching info for [16]: 20190807|150100|CT|P
ID:491837|1.2.840....435

2019-10-30 09:26:32,400|INFO| Fetching info for [17]: 20190807|150151|PT|P
ID:491837|1.2.840....521

2019-10-30 09:26:33,293|INFO| Fetching info for [18]: 20190807|150151|PT|P
ID:491837|1.2.840....522

2019-10-30 09:26:34,165|INFO| Fetching info for [19]: 20190807|150151|PT|P
ID:491837|1.2.840....520

2019-10-30 09:26:35,059|INFO| Fetching info for [20]: 20190807|153445|CT|P
ID:491837|1.2.840....528

2019-10-30 09:26:35,924|INFO| Fetching info for [21]: 20190807|153551|CT|P
ID:491837|1.2.840....530

2019-10-30 09:26:36,798|INFO| Fetching info for [22]: 20190807|153757|PT|P
ID:491837|1.2.840....581

2019-10-30 09:26:37,637|INFO| Fetching info for [23]: 20190807|153757|PT|P
ID:491837|1.2.840....580

2019-10-30 09:26:38,855|INFO| Fetching info for [24]: 20190807|153757|PT|P
ID:491837|1.2.840....579

2019-10-30 09:26:39,686|INFO| Fetching info for [25]: 20190807|153757|PT|PID:491837|1.2.840....578

2019-10-30 09:26:40,924|INFO| Pruning DataFrame for time overlap

2019-10-30 09:26:40,930|INFO| 3/12: found an overlap: 090748-090748 is included in 090548-091154

2019-10-30 09:26:40,934|INFO| 4/11: found an overlap: 092109-092109 is included in 091909-092515

2019-10-30 09:26:40,941|INFO| 7/10: found an overlap: 150151-150453 is included in 150151-150151

2019-10-30 09:26:40,952|INFO| Retrieving all series for study [31]: 1.2.840.113619.2.354.3.168462100.967.1565154502.348

2019-10-30 09:26:41,463|INFO| Found 1 series to exclude based on their description: "Dose Report"

2019-10-30 09:26:41,469|INFO| Found 4 series to exclude based on their description: "FUSION CORONALE", "FUSION AXIALE pulm", "FUSION AXIALE", "FUSION SAGITTALE"

2019-10-30 09:26:41,483|WARNING| Skipping study because it is not from CHUV (institution name: "CLINIQUE DE LA SOURCE")

2019-10-30 09:26:41,486|INFO| Retrieving all series for study [32]: 1.2.826.0.1.3680043.2.146.2.20.812602.1900132181.0

2019-10-30 09:26:41,829|INFO| Found 1 series to exclude based on their description: "PET Statistics"

2019-10-30 09:26:41,831|INFO| Found 1 series to exclude based on their description: "PET Dose Report"

2019-10-30 09:26:41,835|INFO| Found 1 series to exclude based on their description: "Patient Protocol"

2019-10-30 09:26:41,840|INFO| Found 2 series to exclude based on their description: "Fusion Axiale PET SUV5", "Fusion axiale PET Lung SUV5"

2019-10-30 09:26:41,847|INFO| Found 1 series to exclude based on their description: "MIP PET SUV5"

2019-10-30 09:26:41,860|INFO| Going through 8 series

2019-10-30 09:26:41,866|INFO| Fetching info for [0]: 20190807|153852|CT|PID:812602|1.3.12.2...2514

2019-10-30 09:26:42,823|INFO| Fetching info for [1]: 20190807|154054|CT|PID:812602|1.3.12.2...3025

2019-10-30 09:26:43,701|WARNING| WARNING for [1]: 20190807|154054|CT|PID:812602|1.3.12.2...3025: secondary image type found. Trying to recover

2019-10-30 09:26:44,595|INFO| INFO for [1]: 20190807|154054|CT|PID:812602|1.3.12.2...3025: secondary image type recovered: "DERIVED-PRIMARY-AXIAL-CT_SOM5 SPI".

2019-10-30 09:26:44,601|INFO| Fetching info for [2]: 20190807|154146|PT|PID:812602|1.3.12.2...0727

2019-10-30 09:26:45,524|INFO| Fetching info for [3]: 20190807|154146|PT|PID:812602|1.3.12.2...9440

2019-10-30 09:26:48,714|INFO| Fetching info for [4]: 20190807|154146|PT|PID:812602|1.3.12.2...8318

2019-10-30 09:26:49,605|WARNING| WARNING for [4]: 20190807|154146|PT|PID:812602|1.3.12.2...8318: secondary image type found. Trying to recover

2019-10-30 09:26:50,421|INFO| INFO for [4]: 20190807|154146|PT|PID:812602|1.3.12.2...8318: secondary image type recovered: "ORIGINAL-PRIMARY".

2019-10-30 09:26:50,425|INFO| Fetching info for [5]: 20190807|154456|CT|PID:812602|1.3.12.2...3795

2019-10-30 09:26:51,356|INFO| Fetching info for [6]: 20190807|154547|CT|PID:812602|1.3.12.2...4565

2019-10-30 09:26:52,416|INFO| Fetching info for [7]: 20190807|154715|CT|PID:812602|1.3.12.2...6358

2019-10-30 09:26:53,305|INFO| Pruning DataFrame for time overlap

2019-10-30 09:26:53,313|INFO| Retrieving all series for study [33]: 1.2.826.0.1.3680043.2.146.2.20.467560.1900183821.0

2019-10-30 09:26:53,641|INFO| Found 1 series to exclude based on their description: "Patient Protocol"

2019-10-30 09:26:53,656|INFO| Going through 12 series
2019-10-30 09:26:53,659|INFO| Fetching info for [0]: 20190807|161206|NM|PID:467560|1.3.12.2...0008
2019-10-30 09:26:57,521|INFO| Fetching info for [1]: 20190807|163315|NM|PID:467560|1.3.12.2...0007
2019-10-30 09:27:01,851|INFO| Fetching info for [2]: 20190807|163315|PT|PID:467560|1.3.12.2...0014
2019-10-30 09:27:02,672|INFO| Fetching info for [3]: 20190807|164635|NM|PID:467560|1.3.12.2...0004
2019-10-30 09:27:05,990|INFO| Fetching info for [4]: 20190807|164635|NM|PID:467560|1.3.12.2...0010
2019-10-30 09:27:10,410|INFO| Fetching info for [5]: 20190807|165950|CT|PID:467560|1.3.12.2...0013
2019-10-30 09:27:11,902|INFO| Fetching info for [6]: 20190807|170022|CT|PID:467560|1.3.12.2...0147
2019-10-30 09:27:12,771|INFO| Fetching info for [7]: 20190807|170106|CT|PID:467560|1.3.12.2...1234
2019-10-30 09:27:13,641|INFO| Fetching info for [8]: 20190807|170129|CT|PID:467560|1.3.12.2...1613
2019-10-30 09:27:15,309|INFO| Fetching info for [9]: 20190807|170159|CT|PID:467560|1.3.12.2...2118
2019-10-30 09:27:16,285|INFO| Fetching info for [10]: 20190807|170601|NM|PID:467560|1.3.12.2...0020
2019-10-30 09:27:22,164|INFO| Fetching info for [11]: 20190807|170649|NM|PID:467560|1.3.12.2...0023
2019-10-30 09:27:26,476|INFO| Pruning DataFrame for time overlap
2019-10-30 09:27:26,481|INFO| 1/4: found an overlap: 163315-163315 is included in 163315-164512
2019-10-30 09:27:26,486|INFO| Retrieving all series for study [34]: 1.2.826.0.1.3680043.2.146.2.20.2702634.1900189302.0
2019-10-30 09:27:26,850|INFO| Found 1 series to exclude based on their description: "PET Statistics"
2019-10-30 09:27:26,852|INFO| Found 1 series to exclude based on their description: "PET Dose Report"
2019-10-30 09:27:26,856|INFO| Found 1 series to exclude based on their description: "Patient Protocol"
2019-10-30 09:27:26,863|INFO| Found 13 series to exclude based on their description: "4DM-Rest PET Cardiac Static", "4DM-ACFunc+Quant", "4DM-Stress PET CardioFreezeDual 8 Gates", "4DM-Stress PET Cardiac Static", "4DM-Rest PET CardioFreeze dual 8 Gates", "4DM-FusionData", "4DM-Rest PET Cardiac gated 8 Gates", "4DM-MIProcessing", "4DM-ACImages", "4DM-ACImages+Quant", "4DM-Stress PET Cardiac Static", "4DM-Rest PET Cardiac Static", "4DM-FusionData"
2019-10-30 09:27:26,868|INFO| Found 2 series to exclude based on their description: "KEY_IMAGES", "KEY_IMAGES"
2019-10-30 09:27:26,879|INFO| Going through 14 series
2019-10-30 09:27:26,883|INFO| Fetching info for [0]: 20190807|161246|CT|PID:2702634|1.3.12.2...2744
2019-10-30 09:27:27,857|INFO| Fetching info for [1]: 20190807|161339|CT|PID:2702634|1.3.12.2...6730
2019-10-30 09:27:28,727|INFO| Fetching info for [2]: 20190807|161616|PT|PID:2702634|1.3.12.2...7115
2019-10-30 09:27:29,727|INFO| Fetching info for [3]: 20190807|161616|PT|PID:2702634|1.3.12.2...5002
2019-10-30 09:27:30,673|INFO| Fetching info for [4]: 20190807|161616|PT|PID:2702634|1.3.12.2...9228
2019-10-30 09:27:31,616|INFO| Fetching info for [5]: 20190807|161616|PT|PID:2702634|1.3.12.2...0993
2019-10-30 09:27:32,437|INFO| Fetching info for [6]: 20190807|161616|PT|PID:2702634|1.3.12.2...1261
2019-10-30 09:27:35,614|INFO| Fetching info for [7]: 20190807|161616|PT|PID:2702634|1.3.12.2...1261

```

D:2702634|1.3.12.2...6809
2019-10-30 09:27:36,689|INFO| Fetching info for [8]: 20190807|163057|PT|PI
D:2702634|1.3.12.2...3454
2019-10-30 09:27:37,608|INFO| Fetching info for [9]: 20190807|163057|PT|PI
D:2702634|1.3.12.2...1341
2019-10-30 09:27:38,497|INFO| Fetching info for [10]: 20190807|163057|PT|P
ID:2702634|1.3.12.2...5567
2019-10-30 09:27:39,415|INFO| Fetching info for [11]: 20190807|163057|PT|P
ID:2702634|1.3.12.2...7074
2019-10-30 09:27:40,241|INFO| Fetching info for [12]: 20190807|163057|PT|P
ID:2702634|1.3.12.2...3417
2019-10-30 09:27:41,055|INFO| Fetching info for [13]: 20190807|163057|PT|P
ID:2702634|1.3.12.2...3152
2019-10-30 09:27:42,739|INFO| Pruning DataFrame for time overlap
2019-10-30 09:27:42,745|INFO| 3/6: found an overlap: 161829-161829 is inc
luded in 161629-162235
2019-10-30 09:27:42,750|INFO| 5/5: found an overlap: 163310-163310 is inc
luded in 163310-163311
2019-10-30 09:27:42,756|INFO| Retrieving all series for study [35]: 1.3.1
2.2.1107.5.6.1.2013.31330119080712243471100000003
2019-10-30 09:27:43,047|INFO| Found 1 series to exclude based on their des
cription: "Patient Protocol"
2019-10-30 09:27:43,050|INFO| Found 1 series to exclude based on their des
cription: "Results MM Oncology Reading"
2019-10-30 09:27:43,052|INFO| Found 3 series to exclude based on their des
cription: "FUSION AX AC", "FUSION COR AC", "FUSION AX AC"
2019-10-30 09:27:43,056|INFO| Found 1 series to exclude based on their des
cription: "KEY_IMAGES"
2019-10-30 09:27:43,066|INFO| Going through 9 series
2019-10-30 09:27:43,070|INFO| Fetching info for [0]: 20190807|154359|NM|PI
D:640564|1.2.840....63.0
2019-10-30 09:27:43,857|INFO| Fetching info for [1]: 20190807|155920|NM|PI
D:640564|1.2.840....58.0
2019-10-30 09:27:44,627|INFO| Fetching info for [2]: 20190807|171752|NM|PI
D:640564|1.3.12.2...0004
2019-10-30 09:27:45,908|INFO| Fetching info for [3]: 20190807|173710|CT|PI
D:640564|1.3.12.2...0004
2019-10-30 09:27:47,044|INFO| Fetching info for [4]: 20190807|173735|CT|PI
D:640564|1.3.12.2...0186
2019-10-30 09:27:47,835|INFO| Fetching info for [5]: 20190807|173814|CT|PI
D:640564|1.3.12.2...2874
2019-10-30 09:27:48,673|INFO| Fetching info for [6]: 20190807|173837|CT|PI
D:640564|1.3.12.2...3262
2019-10-30 09:27:49,558|INFO| Fetching info for [7]: 20190807|174040|NM|PI
D:640564|1.3.12.2...0009
2019-10-30 09:27:50,351|INFO| Fetching info for [8]: 20190807|174047|NM|PI
D:640564|1.3.12.2...0012
2019-10-30 09:27:51,174|INFO| Pruning DataFrame for time overlap

```

Show some example data

In [34]:

```
#df_studies
df_series.iloc[:, [0,3,4,5,6,7,13,14,15]]
```

Out[34]:

	Study Date	Series Time	Modality	Institution Name	Series Description	Patient ID	start_time	end_time	
0	20190807	154359	NM	MEDECINE NUCLEAIRE CHUV LAUSANNE	DYNAMIC	640564	154359	155859	MILL
1	20190807	155920	NM	MEDECINE NUCLEAIRE CHUV LAUSANNE	OAG	640564	155920	160420	MILL
2	20190807	171752	NM	Radiologie CHUV	SPECT Thorax	640564	171752	173252	
3	20190807	173710	CT	Radiologie CHUV	Topogram 0.6 T20s	640564	173717	173717	
4	20190807	173735	CT	Radiologie CHUV	AC Thorax LD 5.0 B08s	640564	173758	173810	

Look for a study with a "reprise"

In [61]:

```
#logging.info(df_studies.iloc[2, :])  
#df_series = find_series_for_study(config, df_studies.iloc[2, :])  
ICD.display(df_series.iloc[:, [1,3,4,5,6,7,11,12]])
```

	Series Date	Series Time	Modality	Institution Name	Series Description	Patient ID	Number of Series Related Instances	Proto
0	20190807	090159	CT	Centre hospitalier universitaire vaudois	Topogram 0.6 T80f	491837	1	2_Pet_Rb
1	20190807	090244	CT	Centre hospitalier universitaire vaudois	AC CT Cardiac 3.0 HD_FoV rest iMAR	491837	132	2_Pet_Rb
2	20190807	090535	PT	Centre hospitalier universitaire vaudois	Rest PET CardioFreeze dual 8 Gates	491837	1056	
3	20190807	090535	PT	Centre hospitalier universitaire vaudois	Rest PET CardioFreeze single 8 Gates	491837	1056	
4	20190807	090535	PT	Centre hospitalier universitaire vaudois	Rest PET Cardiac gated 8 Gates	491837	1056	
5	20190807	090535	PT	Centre hospitalier universitaire vaudois	Rest PET Cardiac NAC Static	491837	132	
6	20190807	090535	PT	Centre hospitalier universitaire vaudois	Rest PET Cardiac Static	491837	132	
7	20190807	090535	PT	Centre hospitalier universitaire vaudois	Rest PET Cardiac Dynamic	491837	2772	
8	20190807	091856	PT	Centre hospitalier universitaire vaudois	Stress PET CardioFreezeSingle 8 Gates	491837	1056	
9	20190807	091856	PT	Centre hospitalier universitaire vaudois	Stress PET Cardio Gated 8 Gates	491837	1056	
10	20190807	091856	PT	Centre hospitalier universitaire vaudois	Stress PET CardioFreezeDual 8 Gates	491837	1056	
11	20190807	091856	PT	Centre hospitalier universitaire vaudois	Stress PET Cardiac Static	491837	132	
12	20190807	091856	PT	Centre hospitalier universitaire vaudois	Stress PET Cardiac NAC Static	491837	132	
13	20190807	091856	PT	Centre hospitalier universitaire vaudois	Stress PET Cardiac Dynamic	491837	2772	

	Series Date	Series Time	Modality	Institution Name	Series Description	Patient ID	Number of Series Related Instances	Proto
14	20190807	145933	CT	PET CT CHUV	CT SCOUT	491837	2	3. CENTR
15	20190807	150100	CT	PET CT CHUV	CT BONE 1.25 ASIR40	491837	268	3. CENTR
16	20190807	150100	CT	PET CT CHUV	CT CENTRAGE 3.75 STD ASIR40	491837	83	3. CENTR
17	20190807	150151	PT	PET CT CHUV	Pet FDG Centrage NAC	491837	47	3. CENTR
18	20190807	150151	PT	PET CT CHUV	Pet Centrage EANM	491837	47	3. CENTR
19	20190807	150151	PT	PET CT CHUV	Pet FDG Centrage MAC	491837	83	3. CENTR
20	20190807	153445	CT	PET CT CHUV	CT SCOUT Cardiac	491837	1	4. CO
21	20190807	153551	CT	PET CT CHUV	CTAC COEUR	491837	47	4. CO
22	20190807	153757	PT	PET CT CHUV	Pet FDG Coeur Stat 10m FOV30	491837	47	4. CO
23	20190807	153757	PT	PET CT CHUV	Pet FDG Coeur stat 10min EANM	491837	47	4. CO
24	20190807	153757	PT	PET CT CHUV	Pet FDG Coeur Stat 10min NAC	491837	47	4. CO
25	20190807	153757	PT	PET CT CHUV	Pet FDG Coeur Stat 10min MAC	491837	47	4. CO

Save the data

In []:

```
df_studies.to_pickle(config['main']['start_date'] + '.pickle')
```

Further process the studies

In [24]:

```
df = df_studies.loc[:, ['Study Date', 'Study Description', 'Patient ID', 'machines']]
df.columns = ['date', 'descr', 'pid', 'machine']
df['start_time'] = df_studies.loc[:, 'Study Time']
df['end_time'] = df_studies.loc[:, 'overall_time_range'].apply(lambda s: s.split('-')[1])
df
```

Out[24]:

	date	descr	pid	
1	20190807	MAG3 POST	3278159	M
2	20190807	PET^2_Pet_Rb82_Coeur (Adult)	2613150	Biograph64,Biogr
3	20190807	PET^2_Pet_Rb82_Coeur (Adult)	491837	690,Biograph64,B
4	20190807	MAG3 POST	3229908	M
6	20190807	PET^1_Pet_FDG_CorpsEntier_Flow_ONCOFREEZE_3min (Adult)	2987508	Biograph64,Biogr
7	20190807	PET-CT FDG TRONC	802228	
8	20190807	PET-CT FDG WB	794943	
9	20190807	MAG3 POST	3261643	M
10	20190807	PET^1_Pet_FDG_Tronc_Flow (Adult)	3211253	Biograph64,Biogr
11	20190807	PET-CT FDG TRONC	2899016	
12	20190807	MIBG-24h	3121044	
13	20190807	PET^1_Pet_FDG_Tronc_Flow_ONCOFREEZE_Inspirium (Adult)	2023786	Biograph64,Biogr
14	20190807	PET-CT FDG TRONC	798830	
15	20190807	PET CT TRONC	650349	
16	20190807	MAG3 POST	2229451	M
17	20190807	PET^1_Pet_FDG_Tronc_Flow (Adult)	167830	Biograph64,Biogr
18	20190807	PET-CT FDG TRONC	2806473	
19	20190807	PERFUSIONembolie	3129603	Symbia I
20	20190807	PET^1_Pet_FDG_Tronc_Flow_ONCOFREEZE_Inspirium (Adult)	988558	Biograph64,Biogr
21	20190807	PET-CT FDG TRONC	2988596	
22	20190807	PET^1_Pet_FDG_Tronc_Flow (Adult)	3069530	Biograph64,Biogr
23	20190807	MAG3 POST	3274879	M
25	20190807	PET^1_PET_FDG_WB_Flow (Child)	2898026	Biograph64,Biogr
26	20190807	PET-CT RB82 COEUR	2187153	
27	20190807	PET^1_Pet_FDG_Tronc_Flow (Adult)	790797	Biograph64,Biogr
28	20190807	GGL MELANOME	638459	Symbia I
29	20190807	PET^1_PET_FDG_WB_Flow (Child)	3137265	Biograph64,Biogr
30	20190807	PET CT FDG COEUR	491837	690,Biograph64,B
32	20190807	PET^1_Pet_FDG_Tronc_Flow (Adult)	812602	Biograph64,Biogr
33	20190807	Os_1Phase	467560	Symbia I
34	20190807	PET^2_Pet_Rb82_Coeur (Adult)	2702634	Biograph64,Biogr
35	20190807	GGL SEIN G	640564	16,Encore2,M



Rename the machines to have some consensus

In [25]:

```
machine_names = ['Vision 600', 'Discovery 690', 'Millennium MPR', 'Intevo 16', 'Discovery 670']

"""
Biograph64/vision PT
discovery 690 PT
*discovery 670 SPECT
Millennium SPECT sans CT
Encore2/Intevo SPECT
"""

for machine_name in machine_names:
    matching_rows = df['machine'].str.match('.*' + machine_name + '.*', case=False)
    if matching_rows.sum() > 0:
        logging.info('Found {} rows matching the name "{}":'.format(matching_rows.sum(), machine_name))
        df.loc[matching_rows, 'machine'] = machine_name

# replace the "Encore2" machine name to "Intevo", since it is the same machine
#df.loc[df['machine'] == 'Encore2', 'machine'] = 'Intevo 16'
#machine_names.remove('Encore2')

df
```


2019-10-30 09:51:08,870|INFO| Found 14 rows matching the name "Vision 60
0":
2019-10-30 09:51:08,874|INFO| Found 8 rows matching the name "Discovery 69
0":
2019-10-30 09:51:08,877|INFO| Found 6 rows matching the name "Millennium M
PR":
2019-10-30 09:51:08,880|INFO| Found 3 rows matching the name "Intevo 16":
2019-10-30 09:51:08,885|INFO| Found 1 rows matching the name "Encore2":

Out[25]:

	date	descr	pid	machine	start
1	20190807	MAG3 POST	3278159	Millennium MPR	0
2	20190807	PET^2_Pet_Rb82_Coeur (Adult)	2613150	Vision 600	0
3	20190807	PET^2_Pet_Rb82_Coeur (Adult)	491837	Vision 600	0
4	20190807	MAG3 POST	3229908	Millennium MPR	0
6	20190807	PET^1_Pet_FDG_CorpsEntier_Flow_ONCOFREEZE_3min (Adult)	2987508	Vision 600	0
7	20190807	PET-CT FDG TRONC	802228	Discovery 690	0
8	20190807	PET-CT FDG WB	794943	Discovery 690	1
9	20190807	MAG3 POST	3261643	Millennium MPR	1
10	20190807	PET^1_Pet_FDG_Tronc_Flow (Adult)	3211253	Vision 600	1
11	20190807	PET-CT FDG TRONC	2899016	Discovery 690	1
12	20190807	MIBG-24h	3121044	Encore2	1
13	20190807	PET^1_Pet_FDG_Tronc_Flow_ONCOFREEZE_Inspirium (Adult)	2023786	Vision 600	1
14	20190807	PET-CT FDG TRONC	798830	Discovery 690	1
15	20190807	PET CT TRONC	650349	Discovery 690	1
16	20190807	MAG3 POST	2229451	Millennium MPR	1
17	20190807	PET^1_Pet_FDG_Tronc_Flow (Adult)	167830	Vision 600	1
18	20190807	PET-CT FDG TRONC	2806473	Discovery 690	1
19	20190807	PERFUSIONembolie	3129603	Intevo 16	1
20	20190807	PET^1_Pet_FDG_Tronc_Flow_ONCOFREEZE_Inspirium (Adult)	988558	Vision 600	1
21	20190807	PET-CT FDG TRONC	2988596	Discovery 690	1
22	20190807	PET^1_Pet_FDG_Tronc_Flow (Adult)	3069530	Vision 600	1
23	20190807	MAG3 POST	3274879	Millennium MPR	1
25	20190807	PET^1_PET_FDG_WB_Flow (Child)	2898026	Vision 600	1
26	20190807	PET-CT RB82 COEUR	2187153	Discovery 690	1
27	20190807	PET^1_Pet_FDG_Tronc_Flow (Adult)	790797	Vision 600	1
28	20190807	GGL MELANOME	638459	Intevo 16	1
29	20190807	PET^1_PET_FDG_WB_Flow (Child)	3137265	Vision 600	1
30	20190807	PET CT FDG COEUR	491837	Vision 600	1

	date	descr	pid	machine	start
32	20190807	PET^1_Pet_FDG_Tronc_Flow (Adult)	812602	Vision 600	1
33	20190807	Os_1Phase	467560	Intevo 16	1
34	20190807	PET^2_Pet_Rb82_Coeur (Adult)	2702634	Vision 600	1
35	20190807	GGL SEIN G	640564	Millennium MPR	1

Rename the descriptions to have some consensus

In [26]:

```
description_patterns = {'FDG Corps Entier': 'fdgcorpstentier', 'FDG Tronc': 'fdgtronc',
                        'Rb82 Coeur': 'rb82coeur',
                        'FDG Abdomen TAP Veineux Corps Entier': 'abdomen1fdgtapveineuxpe
tcorpstentierflowadult',
                        'Scintigraphie OctreoScan': 'scintioctreoscan', 'FDG WB Child':
'pet1petfdgwbflowchild'}
for descr in description_patterns.keys():
    matching_rows = df['descr'].str.lower().str.replace('[_^ ()]', '').str\
        .match('.*' + description_patterns[descr] + '.*', case=False)
    if matching_rows.sum() > 0:
        logging.info('Found {} rows matching the name "{}":'.format(matching_rows.sum
        ( ), descr))
        df.loc[matching_rows, 'descr'] = descr

df
```

2019-10-30 09:51:11,849|INFO| Found 1 rows matching the name "FDG Corps Entier":
2019-10-30 09:51:11,853|INFO| Found 12 rows matching the name "FDG Tronc":
2019-10-30 09:51:11,857|INFO| Found 4 rows matching the name "Rb82 Coeur":
2019-10-30 09:51:11,868|INFO| Found 2 rows matching the name "FDG WB Child":

Out[26]:

	date	descr	pid	machine	start_time	end_time
1	20190807	MAG3 POST	3278159	Millennium MPR	075726	090657
2	20190807	Rb82 Coeur	2613150	Vision 600	080143	082917
3	20190807	Rb82 Coeur	491837	Vision 600	083812	153757
4	20190807	MAG3 POST	3229908	Millennium MPR	091107	101634
6	20190807	FDG Corps Entier	2987508	Vision 600	094007	120521
7	20190807	FDG Tronc	802228	Discovery 690	094707	100304
8	20190807	PET-CT FDG WB	794943	Discovery 690	101340	104249
9	20190807	MAG3 POST	3261643	Millennium MPR	102031	114615
10	20190807	FDG Tronc	3211253	Vision 600	103835	105823
11	20190807	FDG Tronc	2899016	Discovery 690	105012	110539
12	20190807	MIBG-24h	3121044	Encore2	111404	123442
13	20190807	FDG Tronc	2023786	Vision 600	111815	114858
14	20190807	FDG Tronc	798830	Discovery 690	112059	113619
15	20190807	PET CT TRONC	650349	Discovery 690	114432	121901
16	20190807	MAG3 POST	2229451	Millennium MPR	115726	124539
17	20190807	FDG Tronc	167830	Vision 600	121141	123415
18	20190807	FDG Tronc	2806473	Discovery 690	122939	125604
19	20190807	PERFUSIONembolie	3129603	Intevo 16	124251	133643
20	20190807	FDG Tronc	988558	Vision 600	124426	130711
21	20190807	FDG Tronc	2988596	Discovery 690	130456	132009
22	20190807	FDG Tronc	3069530	Vision 600	131115	134702
23	20190807	MAG3 POST	3274879	Millennium MPR	134011	151140
25	20190807	FDG WB Child	2898026	Vision 600	135252	141738
26	20190807	Rb82 Coeur	2187153	Discovery 690	135641	142814
27	20190807	FDG Tronc	790797	Vision 600	142203	144023
28	20190807	GGL MELANOME	638459	Intevo 16	142434	153024
29	20190807	FDG WB Child	3137265	Vision 600	144316	153156
30	20190807	PET CT FDG COEUR	491837	Vision 600	145933	153757
32	20190807	FDG Tronc	812602	Vision 600	153740	155259
33	20190807	Os_1Phase	467560	Intevo 16	154915	170102
34	20190807	Rb82 Coeur	2702634	Vision 600	160852	163311
35	20190807	GGL SEIN G	640564	Millennium MPR	170851	173810

Check for overlap for each machine

In [27]:

```
for machine in machine_names:
    logging.info('Checking overlap for machine "{}".format(machine))
    df_machine = df[df['machine'] == machine]
    df[df['machine'] == machine] = prunes_series_by_time_overlap(df_machine)
df
```

2019-10-30 09:51:15,536	INFO	Checking overlap for machine "Vision 600"
2019-10-30 09:51:15,538	INFO	Pruning DataFrame for time overlap
2019-10-30 09:51:15,554	INFO	Checking overlap for machine "Discovery 690"
2019-10-30 09:51:15,555	INFO	Pruning DataFrame for time overlap
2019-10-30 09:51:15,568	INFO	Checking overlap for machine "Millennium MP R"
2019-10-30 09:51:15,569	INFO	Pruning DataFrame for time overlap
2019-10-30 09:51:15,579	INFO	Checking overlap for machine "Intevo 16"
2019-10-30 09:51:15,582	INFO	Pruning DataFrame for time overlap
2019-10-30 09:51:15,590	INFO	Checking overlap for machine "Biograph20"
2019-10-30 09:51:15,591	INFO	Pruning DataFrame for time overlap
2019-10-30 09:51:15,595	INFO	Checking overlap for machine "Encore2"
2019-10-30 09:51:15,598	INFO	Pruning DataFrame for time overlap

Out[27]:

	date	descr	pid	machine	start_time	end_time
1	20190807	MAG3 POST	3278159	Millennium MPR	075726	090657
2	20190807	Rb82 Coeur	2613150	Vision 600	080143	082917
3	20190807	Rb82 Coeur	491837	Vision 600	083812	153757
4	20190807	MAG3 POST	3229908	Millennium MPR	091107	101634
6	20190807	FDG Corps Entier	2987508	Vision 600	094007	120521
7	20190807	FDG Tronc	802228	Discovery 690	094707	100304
8	20190807	PET-CT FDG WB	794943	Discovery 690	101340	104249
9	20190807	MAG3 POST	3261643	Millennium MPR	102031	114615
10	20190807	FDG Tronc	3211253	Vision 600	103835	105823
11	20190807	FDG Tronc	2899016	Discovery 690	105012	110539
12	20190807	MIBG-24h	3121044	Encore2	111404	123442
13	20190807	FDG Tronc	2023786	Vision 600	111815	114858
14	20190807	FDG Tronc	798830	Discovery 690	112059	113619
15	20190807	PET CT TRONC	650349	Discovery 690	114432	121901
16	20190807	MAG3 POST	2229451	Millennium MPR	115726	124539
17	20190807	FDG Tronc	167830	Vision 600	121141	123415
18	20190807	FDG Tronc	2806473	Discovery 690	122939	125604
19	20190807	PERFUSIONembolie	3129603	Intevo 16	124251	133643
20	20190807	FDG Tronc	988558	Vision 600	124426	130711
21	20190807	FDG Tronc	2988596	Discovery 690	130456	132009
22	20190807	FDG Tronc	3069530	Vision 600	131115	134702
23	20190807	MAG3 POST	3274879	Millennium MPR	134011	151140
25	20190807	FDG WB Child	2898026	Vision 600	135252	141738
26	20190807	Rb82 Coeur	2187153	Discovery 690	135641	142814
27	20190807	FDG Tronc	790797	Vision 600	142203	144023
28	20190807	GGL MELANOME	638459	Intevo 16	142434	153024
29	20190807	FDG WB Child	3137265	Vision 600	144316	153156
30	20190807	PET CT FDG COEUR	491837	Vision 600	145933	153757
32	20190807	FDG Tronc	812602	Vision 600	153740	155259
33	20190807	Os_1Phase	467560	Intevo 16	154915	170102
34	20190807	Rb82 Coeur	2702634	Vision 600	160852	163311
35	20190807	GGL SEIN G	640564	Millennium MPR	170851	173810

In [29]:

```
logging.info(set(df['machine']))  
df.sort_values('machine')
```

```
2019-10-30 09:51:47,856|INFO| {'Millennium MPR', 'Discovery 690', 'Encore  
2', 'Vision 600', 'Intevo 16'}
```

Out[29]:

	date	descr	pid	machine	start_time	end_time
26	20190807	Rb82 Coeur	2187153	Discovery 690	135641	142814
7	20190807	FDG Tronc	802228	Discovery 690	094707	100304
8	20190807	PET-CT FDG WB	794943	Discovery 690	101340	104249
21	20190807	FDG Tronc	2988596	Discovery 690	130456	132009
11	20190807	FDG Tronc	2899016	Discovery 690	105012	110539
18	20190807	FDG Tronc	2806473	Discovery 690	122939	125604
14	20190807	FDG Tronc	798830	Discovery 690	112059	113619
15	20190807	PET CT TRONC	650349	Discovery 690	114432	121901
12	20190807	MIBG-24h	3121044	Encore2	111404	123442
33	20190807	Os_1Phase	467560	Intevo 16	154915	170102
28	20190807	GGL MELANOME	638459	Intevo 16	142434	153024
19	20190807	PERFUSIONembolie	3129603	Intevo 16	124251	133643
1	20190807	MAG3 POST	3278159	Millennium MPR	075726	090657
23	20190807	MAG3 POST	3274879	Millennium MPR	134011	151140
35	20190807	GGL SEIN G	640564	Millennium MPR	170851	173810
4	20190807	MAG3 POST	3229908	Millennium MPR	091107	101634
9	20190807	MAG3 POST	3261643	Millennium MPR	102031	114615
16	20190807	MAG3 POST	2229451	Millennium MPR	115726	124539
2	20190807	Rb82 Coeur	2613150	Vision 600	080143	082917
32	20190807	FDG Tronc	812602	Vision 600	153740	155259
30	20190807	PET CT FDG COEUR	491837	Vision 600	145933	153757
29	20190807	FDG WB Child	3137265	Vision 600	144316	153156
3	20190807	Rb82 Coeur	491837	Vision 600	083812	153757
27	20190807	FDG Tronc	790797	Vision 600	142203	144023
34	20190807	Rb82 Coeur	2702634	Vision 600	160852	163311
6	20190807	FDG Corps Entier	2987508	Vision 600	094007	120521
22	20190807	FDG Tronc	3069530	Vision 600	131115	134702
20	20190807	FDG Tronc	988558	Vision 600	124426	130711
10	20190807	FDG Tronc	3211253	Vision 600	103835	105823
13	20190807	FDG Tronc	2023786	Vision 600	111815	114858
25	20190807	FDG WB Child	2898026	Vision 600	135252	141738
17	20190807	FDG Tronc	167830	Vision 600	121141	123415

Save processed data

In []:

```
df.to_pickle(config['main']['start_date'] + '_processed.pickle')
```

In [65]:

```
df2 = pd.read_pickle('20190806.pickle')
```

In [66]:

```
df2
```

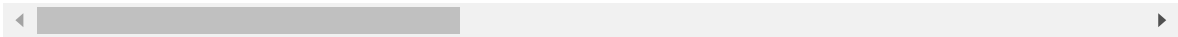
Out[66]:

	Study Date	Study Time	Modalities in Study	Referring Physician's Name	
0	20190806	075538	['NM', 'SR']	VALERIO^MASSIMO	
1	20190806	080313	['PT', 'OT', 'NM', 'CT', 'SR']	DR CARDIOLOGIE^.	
2	20190806	084230	['PT', 'OT', 'NM', 'CT', 'SR']	DR AMBULATOIRE^.	
3	20190806	084334	['PT', 'NM', 'CT', 'SR']	DIR. DEP. DE RADIOLOGIE MEDICALE^.	
4	20190806	085145	['PT', 'CT', 'SR']	DR ONCOLOGIE MEDICALE^.	
5	20190806	091353	['NM', 'SR']	BOHNER^PERRINE	
6	20190806	092544	['PT', 'CT', 'SR']	WAGNER^ANNA DOROTHEA	PET^1_Pet_FDG_CorpsEn
7	20190806	093146	['PT', 'CT', 'SR']	DR ONCOLOGIE MEDICALE^.	
8	20190806	095859	['NM', 'CT']	NIKLAUS^BETTINA^^DOCTORESSE	
9	20190806	100712	['PT', 'CT', 'SR']	DR ONCOLOGIE MEDICALE^.	

	Study Date	Study Time	Modalities in Study	Referring Physician's Name	
10	20190806	101342	['PT', 'CT', 'SR']	DR ONCOLOGIE MEDICALE^.	PET^
11	20190806	102200	['PT', 'CT', 'SR']		
12	20190806	103301	['PT', 'NM', 'CT', 'SR', 'PR']	IFTICENE TREBOUX^ASSIA	
13	20190806	103307	['NM', 'SR']	SANCHEZ^OLIVER	
14	20190806	104333	['PT', 'CT', 'SR']	DR ONCOLOGIE MEDICALE^.	
15	20190806	104339	['PT', 'CT', 'SR', 'PR']	DR ONCOLOGIE MEDICALE^.	Abdomen^1_FDG_TAP_'
16	20190806	112711	['PT', 'CT', 'SR']	STRAVODIMOU^ATHINA	
17	20190806	113042	['NM', 'SR']	SANCHEZ^OLIVER	

	Study Date	Study Time	Modalities in Study	Referring Physician's Name	
18	20190806	113316	['PT', 'CT', 'SR', 'PR']	ZAMAN^KHALIL	PET'
19	20190806	115140	['PT', 'CT', 'SR']	GOROSTIDI^FRANCOIS	
20	20190806	115621	['PT', 'OT', 'NM', 'CT', 'SR']	DR CARDIOLOGIE^.	
21	20190806	122254	['PT', 'CT', 'SR']	APOSTOLOVA^YANA	
22	20190806	123038	['NM', 'CT', 'SR']	MATTER^MAURICE	
23	20190806	123120	['NM', 'SR']	DR N?PHROLOGIE^.	
24	20190806	125153	['PT', 'CT', 'SR', 'PR']	DR MEDECINE INTERNE^.	PET^1_Pet
25	20190806	135657	['NM', 'SR']	RIZZI^MATTIA	
26	20190806	141102	['NM', 'SR']	CHEHADE^HASSIB	
27	20190806	141120	['PT', 'CT', 'SR', 'PR']	DR CARDIOLOGIE^.	PET^1_Pet_FDG_Tronc_
28	20190806	150218	['PT', 'OT', 'NM', 'CT', 'SR']	DR URGENCES^.	

	Study Date	Study Time	Modalities in Study	Referring Physician's Name
29	20190806	152758	['NM', 'SR']	CHEF DE CLINIQUE - CTO1^.
30	20190806	153527	['NM', 'CT', 'SR']	PINCET^LAURENCE



In []: