

D. Y. PATIL EDUCATIONAL COMPLEX, AKURDI, PUNE

PROCDNA



CASE STUDY ANALYSIS

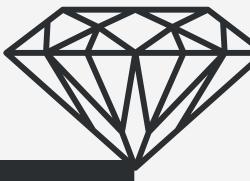
GROUP 11 :

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DATA CHECKS(NULL VALUES) APPLY ON THE DATASETS



• PHYSICAL LEVEL DATA

```
In [5]: a.isnull().sum()
```

```
Out[5]: Physician ID      0  
Physician Name      0  
Specialty          0  
Jan'23              0  
Feb'23              0  
Mar'23              0  
Apr'23              0  
May'23              0  
Jun'23              0  
Jan'23_1            0  
Feb'23_2            0  
Mar'23_3            0  
Apr'23_4            0  
May'23_5            0  
Jun'23_6            0  
Total Sale( Fludara / Mercapto) 0  
total sale ( fludara )    0  
total sale ( Mercapto )   0
```

• AFFILIATION

```
In [11]: b.isnull().sum()
```

```
Out[11]: Physician ID      0  
Physician Name      0  
Hospital ID        2  
Hospital Name       0  
Hospital ZIP        0  
Hospital City       0  
dtype: int64
```

• ZTT

```
In [17]: c.isnull().sum()
```

```
Out[17]: ZIP              0  
Territory_Name       0  
Region_Name          0  
dtype: int64
```

PLOT A GRAPH SHOWING THE SALES (# TOTAL PRESCRIPTIONS) OF BOTH THE GIVEN PRODUCTS (FLUDARA AND MERCAPTO) OVER MONTHS.

Fludara

120K

Sum of Jan'23

400K

Sum of Apr'23

280K

Sum of Feb'23

520K

Sum of May'23

361K

Sum of Mar'23

639K

Sum of Jun'23

Mercapto

240K

Sum of Jan'23_1

440K

Sum of Apr'23_4

240K

Sum of Feb'23_2

600K

Sum of May'23_5

397K

Sum of Mar'23_3

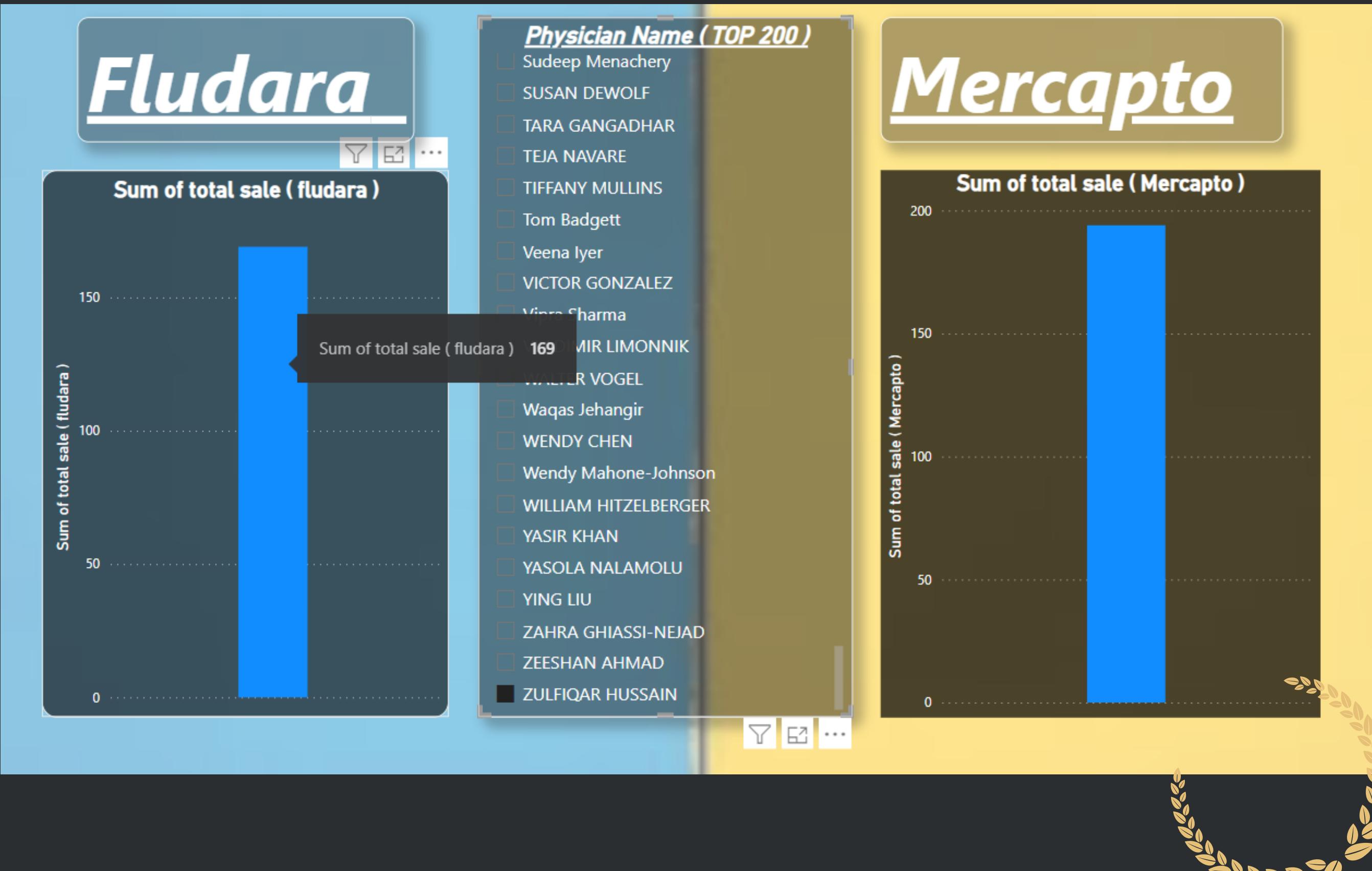
719K

Sum of Jun'23_6

1. Determined the total prescriptions recommended by each doctor for both tablets of Fludara and Mercapto for each month from January to June.

2. From the results table, we were able to quickly notice the differences between the two products.

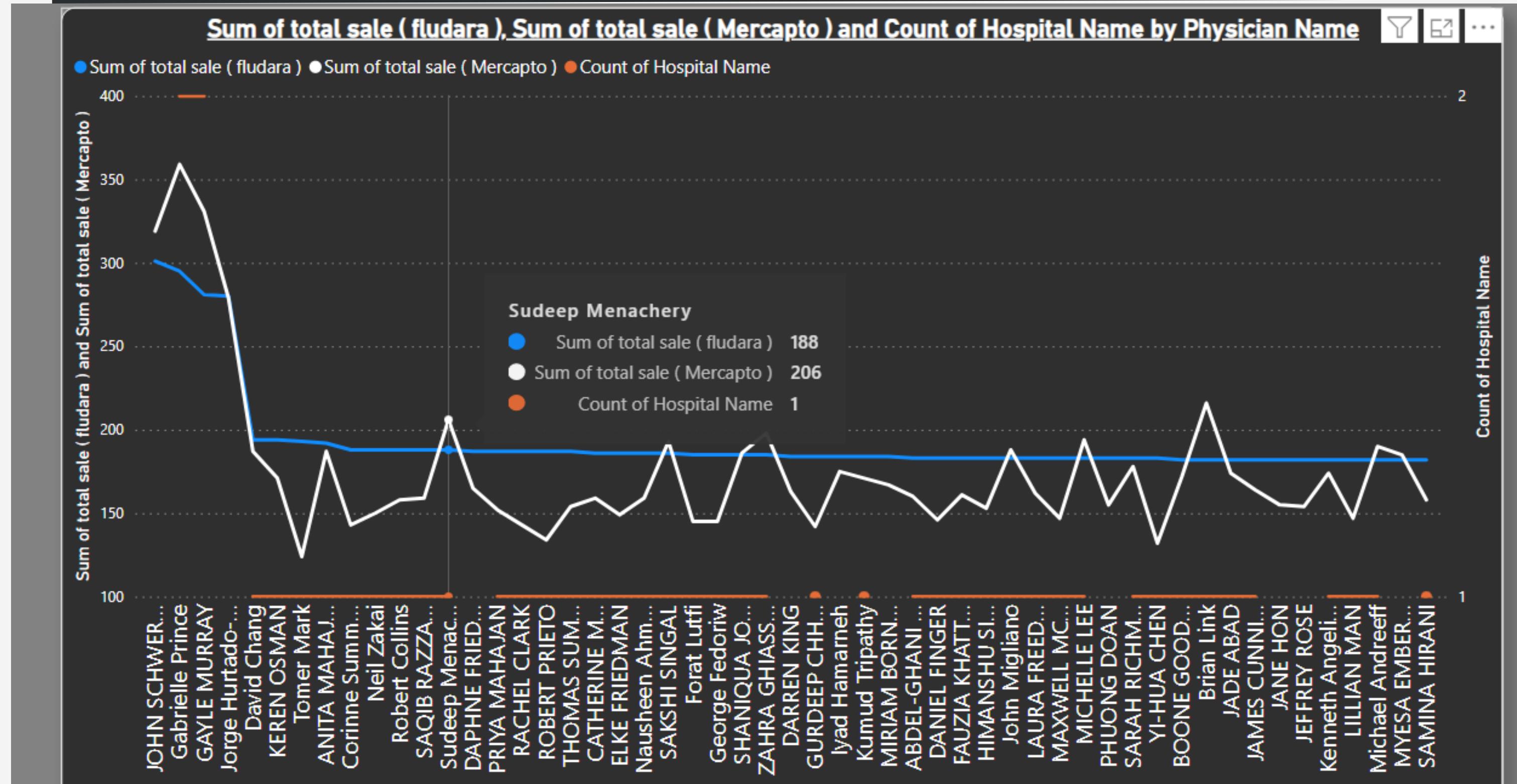
WHO ARE THE TOP 200 PHYSICIANS THAT SHOULD BE TARGETED THE MOST? EXPLAIN THE APPROACH THAT YOU CONSIDERED.



- Calculated the combined sales of Fludara and Mercapto using PowerBI
- Sorted the sum in descending order.
- Selected the top 200 doctors.
- Compare the data using a slider to see which doctor most strongly recommended which tablet either Fludara or Mercapto.

(From this data we are able to see which top doctors recommend Fludara less than Mercapto, so it is easy to take feedback from those doctors on why they do not recommend our tablet and work on it).

Hospitals that are not affiliated with the top 200 physicians

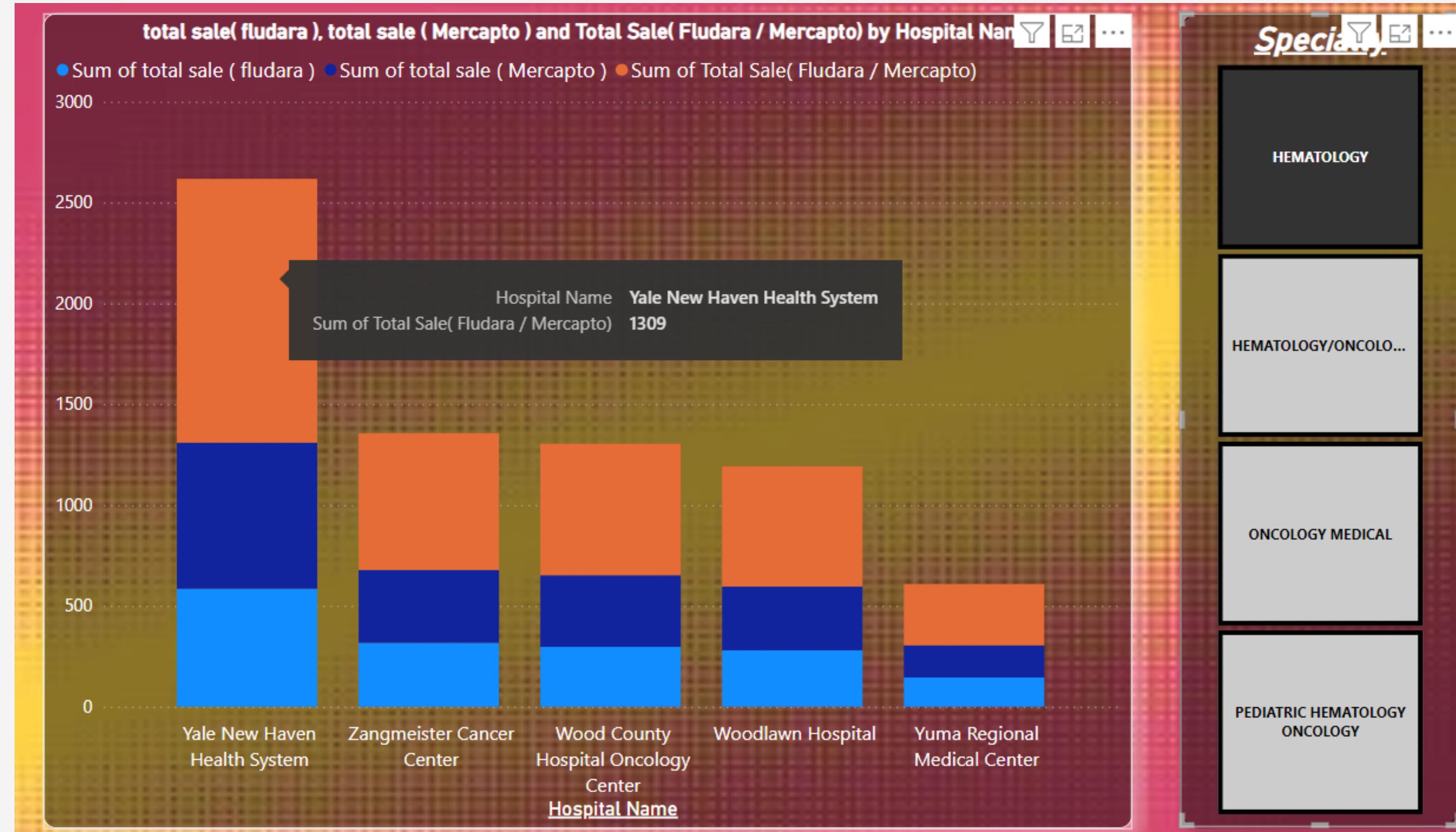


- Orange point indicate the count of hospital name -> and without orange point contain the doctor is not going into the hospital
- Using power Quiry editor we combined total sale for fludara and mercapto
- Using initiator slicer determine top phphysicians

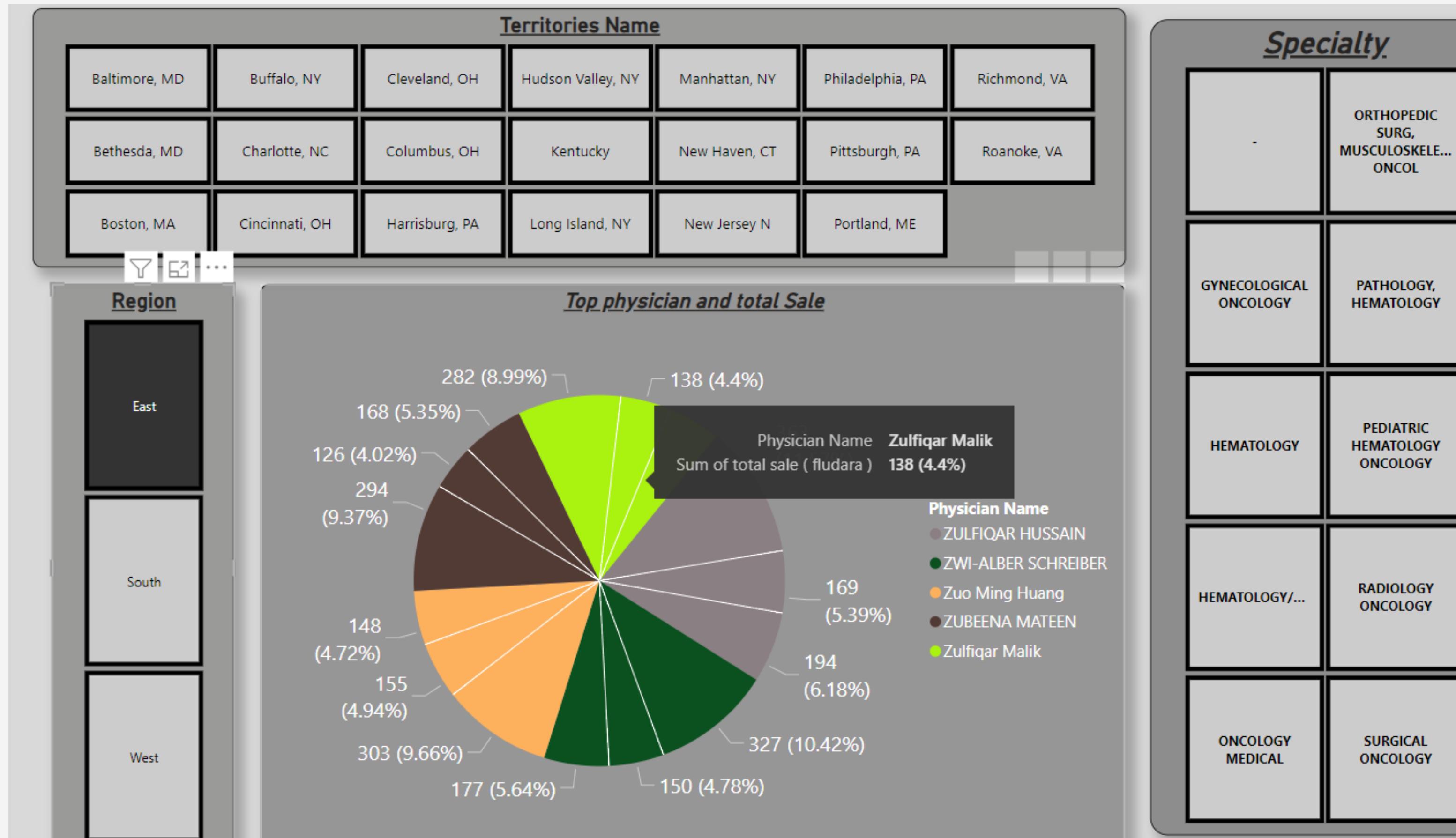
LIST THE TOP 5 HOSPITALS BASED ON THE # PHYSICIANS FROM THE FOLLOWING 4 SPECIALTIES AFFILIATED TO THEM



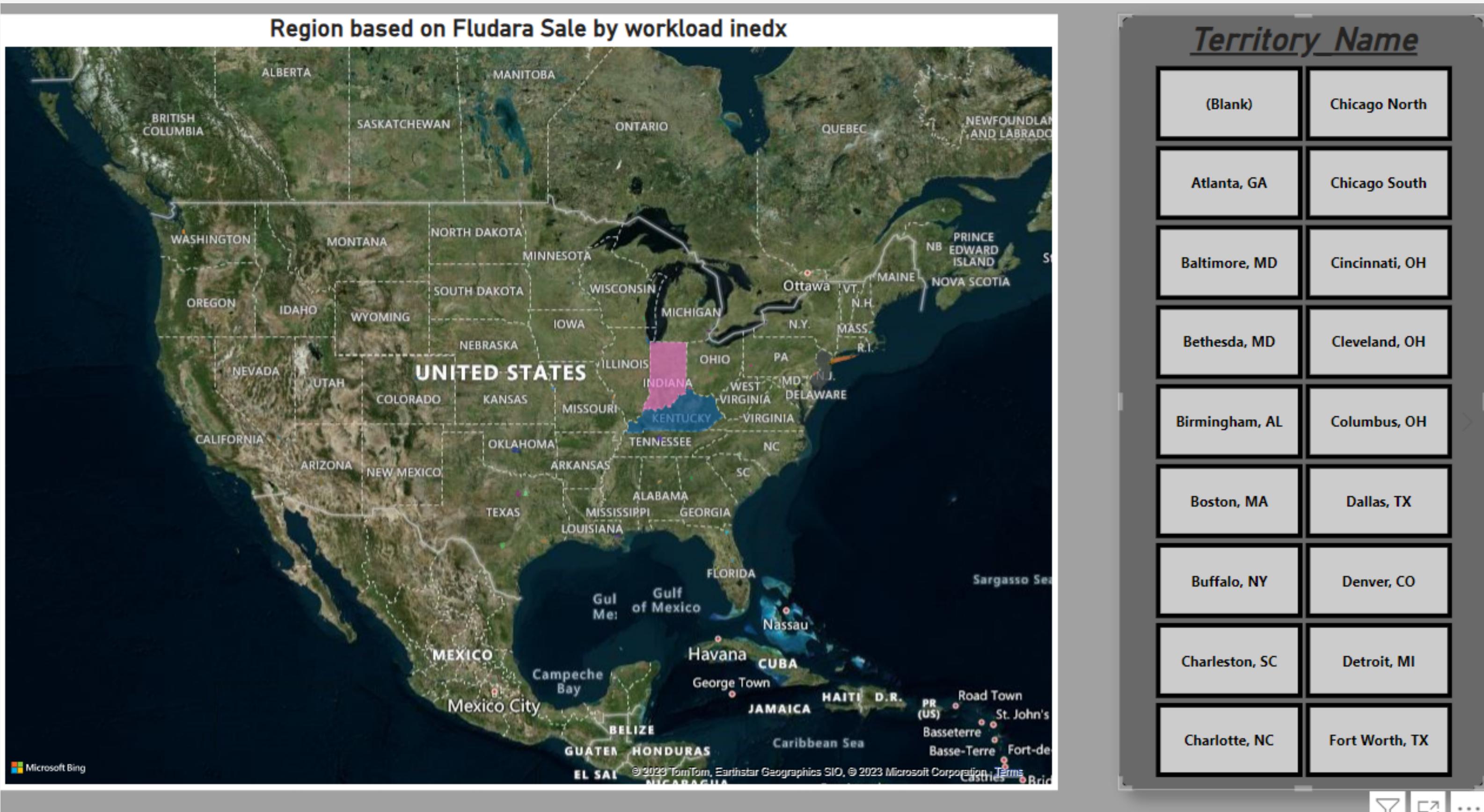
- X axis contain name of the top 5 hospital
- Y axis contain the total sale for each specialty on fludara and mercapto and total sale of the both
- we consist the slicer to which determine the specialty and contain dynamic changes to our data



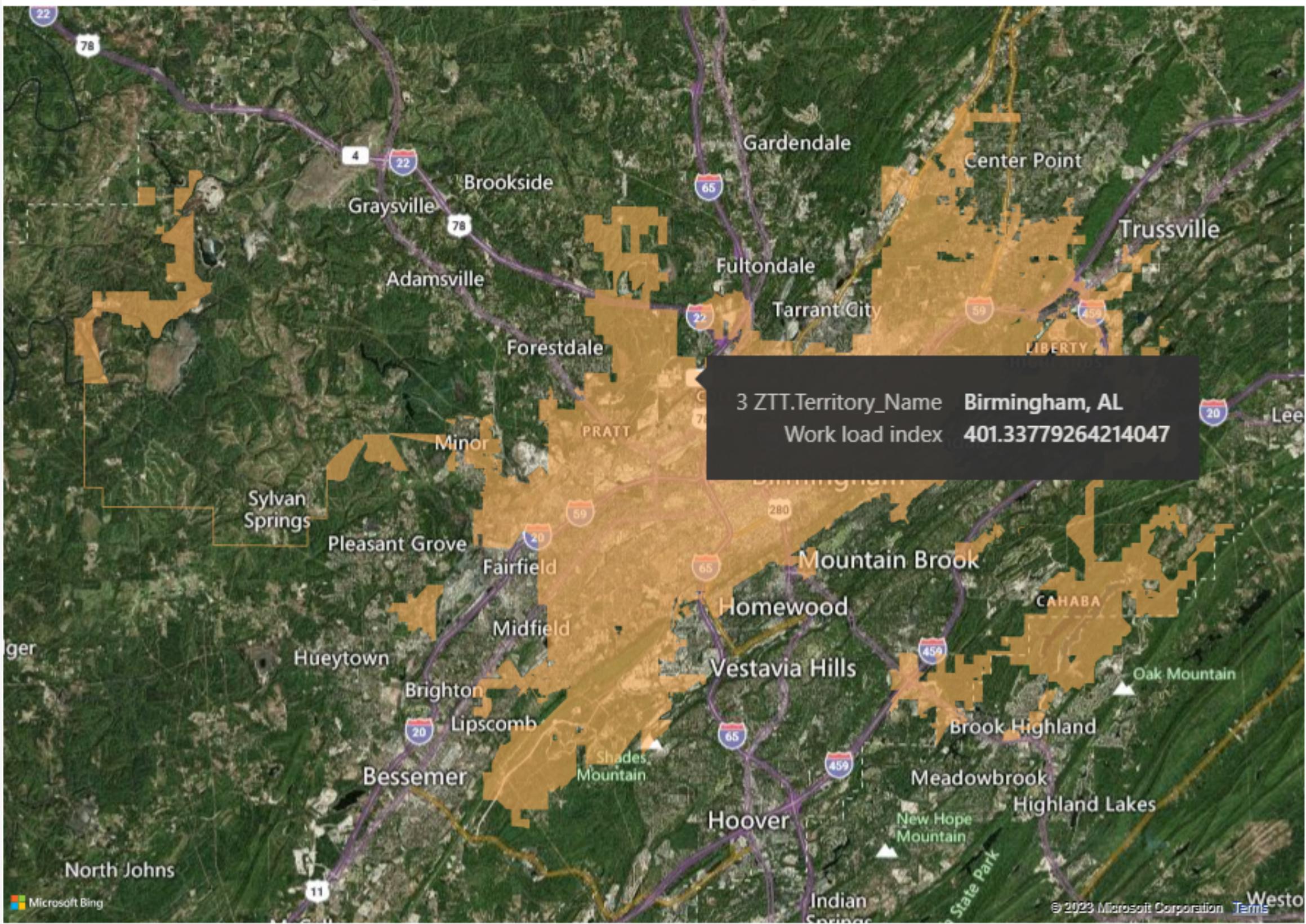
CONTAIN THE TERRITORIES NAME TO THE TOP PHYSICIAN AND TOTAL SALE AND TO THE REGION AND SPECIALTY



PLOT A GRAPH DEPICTING THE WORKLOAD INDEX FOR ALL THE TERRITORIES IN DESCENDING ORDER. WHICH REGION IS PERFORMING BEST BASED ON "FLUDARA" SALES?



Region based on Fludara Sale by workload index



Territory Name

(Blank)	Chicago North
Atlanta, GA	Chicago South
Baltimore, MD	Cincinnati, OH
Bethesda, MD	Cleveland, OH
Birmingham, AL	Columbus, OH
Boston, MA	Dallas, TX
Buffalo, NY	Denver, CO
Charleston, SC	Detroit, MI
Charlotte, NC	Fort Worth, TX

EXCEL SHEET CONTAIN TOP 200 DOCTORS

	A	B	C	D	E	F	G	H
1	Physician ID	Physician Name	Total Sale(Fludara / Mercapto)	total sale (fludara)	total sale (Mercapto)			
2	15976405	Brian Link	398	182	216			
3	32575916	Sudeep Menachery	394	188	206			
4	35494019	SUSAN DEWOLF	390	166	224			
5	19424810	Christopher Rangel	389	161	228			
6	11431733	PAMELA MUNSTER	388	179	209			
7	71738056	JAMES CH'NG	388	166	222			
8	76196425	DAVID TATE	387	180	207			
9	52813028	Krysta Schlis	385	159	226			
10	37394190	Sanjay Ahuja	384	179	205			
11	62179441	Guldeep Uppal	384	167	217			
12	20533776	MELISSA ZIMEL	384	177	207			
13	86463859	DEBORAH AXELROD	383	170	213			
14	19497106	EVAN CANTOR	383	176	207			
15	20762688	JENNIFER KOVATCH	383	167	216			
16	71162601	GUY YOUNG	383	170	213			
17	58773385	ZAHRA GHIASSI-NEJAD	383	185	198			
18	48023088	LAPMAN LUN	383	163	220			
19	99559792	JOSHUA BIES	382	160	222			
20	25665498	David Chang	381	194	187			
21	38828838	Anya Levinson	381	171	210			
22	44884770	MATTHEW KRASIN	380	166	214			
23	74593004	HOWARD LEWIS	380	171	209			
24	21372151	Brad Kahl	380	159	221			
25	43683458	KRISTIN WESSEL	379	177	202			
26	29890312	ANITA MAHAJAN	379	192	187			
27	65681374	Raymond Taetle	379	153	226			
28	42063130	SAKSHI SINGAL	379	186	193			
29	77710215	Benjamin Negin	379	181	198			

Note -> Excel sheet of 200 doctor and not affiliated hospital attached in mail

CREATE MOBILE VIEW

The image shows a mobile application interface with a dark background. At the top, there is a navigation bar with various icons and labels: 'Lines' (with a line icon), 'Lock objects' (with a lock icon), 'Snap to grid' (with a grid icon), 'Filters' (with a funnel icon), 'Bookmarks' (with a bookmark icon), 'Selection' (with a selection icon), and 'Performance' (with a performance icon). Below the navigation bar are two cards displayed on a smartphone screen.

Territories Name

Baltimore, MD	Buffalo, NY
Bethesda, MD	Charlotte, NC
Boston, MA	Cincinnati, OH

Top physician and total Sale

A pie chart titled "Top physician and total Sale" showing the distribution of sales by physician. The chart is divided into six segments, each labeled with a value and a percentage. The legend on the right lists the physicians and their corresponding colors:

- ZULFIQA... (Dark Brown)
- ZWI-ALB... (Dark Green)
- Zuo Min... (Orange)
- ZUBEEN... (Dark Gray)
- Zulfiqar ... (Light Green)

Physician	Total Sale	Percentage
ZULFIQA...	282	(8....)
ZWI-ALB...	363	(1....)
Zuo Min...	294	(...)
ZUBEEN...	327	(10.4....)
Zulfiqar ...	177	(5.64%)

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CONCLUSION



1. On the basis of the top 200 physicians' analysis, we are now able to find which doctor prefer which tablet. If they recommend our competitor's tablet then we must take feedback from those doctor like why they don't trust our tablet. By knowing the reasons it is easy for organization to work on it.
2. We also calculate which hospitals are not affiliated/ or do not suggest Fludara for treatment, on the basis of that we send our sales rep to those hospitals to promote our medicine.
3. On the basis of the workload index we are able to categorize regions.
4. Finding the top 5 hospitals in various category helps us to promote or it is easy for marketing.



THANK YOU !

Thanks!