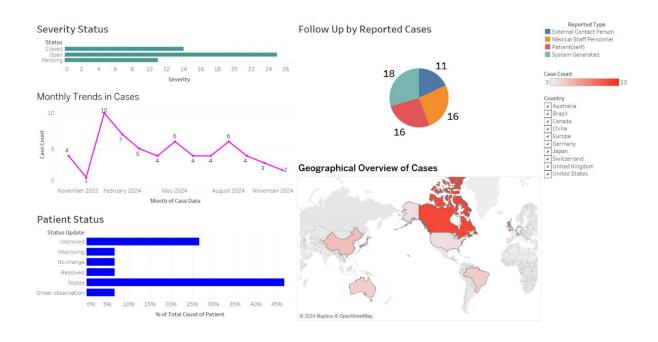
# **Data Visualization Using Tableau**



# 1. Follow-up by Reported Cases (e.g., Patient self-reported, Medical Staff, etc.)

# **SQL Query:**

```
SELECT
ReportedBy,
COUNT(*) AS FollowupCount
FROM
Follow_up
GROUP BY
ReportedBy
ORDER BY
FollowupCount DESC;
```

Visualization: A pie chart to show proportions of follow-up types.

# 2. Cases distribution by regulatory agency regions.

# **SQL Query:**

```
SELECT
    ra.Country,
    COUNT(*) AS TotalCases
FROM
    Regulatory_Case_Reports rcr
JOIN
    Regulatory_Agency ra
ON
    rcr.AgencyID = ra.AgencyID
GROUP BY
    ra.Country
ORDER BY
    TotalCases DESC;
```

Visualization: a map for cases by country

# 3. Monthly Trends in Cases

#### **SQL Query:**

```
SELECT
YEAR (CaseDate) AS Year,
MONTH (CaseDate) AS Month,
COUNT(*) AS CaseCount

FROM
[Case]
GROUP BY
YEAR (CaseDate), MONTH (CaseDate)

ORDER BY
Year, Month;
```

**Visualization**: A line chart for monthly trends

# 4. Severity Status

This visualization is based on a database table containing issue data, including Severity (a numeric value) and Status (categorical values like "Open," "Closed," and "Pending").

#### **Key Points:**

- 1. The chart aggregates the Severity values for each Status and displays them as horizontal bars.
- 2. The Open status has the highest total severity, followed by Pending and Closed.
- 3. This visualization helps identify which status category has the most significant severity impact, useful for prioritizing actions.

**Visualization**: A bar chart for severity status.

#### 5. Patient Status

This visualization represents the percentage distribution of patient counts across various status updates such as "Improved," "Improving," "No change," "Resolved," "Stable," and "Under observation."

#### **Key Points:**

- 1. The **"Stable"** category has the highest proportion of patients, accounting for nearly 45% of the total.
- 2. Categories like "Improved," "Improving," and "Resolved" have relatively lower patient counts.
- 3. This chart aids in tracking the status of patients, highlighting the dominance of stable cases for resource allocation or further action planning.

Visualization: A bar chart for patient status.