

Predictive Analysis **Based on Class Drug**

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Decision Tree

- Correctly Classified Instances 71318 64.2163 %
- Incorrectly Classified Instances 39741 35.7837 %
- Relative absolute error 86.5729 %

=== Confusion Matrix ===

a	b	<-- classified as
51011	13417	a = opana
26324	20307	b = butrans

- Attributes: 6

SEX, AGEGRP, REGION, Category, refill_count, ADMTYP

Decision Tree Rules

Category = inpatients

```
| refill_count <= 10
| | SEX <= 1
| | | refill_count <= 1
| | | | AGEGRP <= 1: butrans (34.0/6.0)
| | | | AGEGRP > 1: opana (13766.0/5796.0)
| | | refill_count > 1
| | | | refill_count <= 7
| | | | | REGION <= 1
| | | | | AGEGRP <= 2
| | | | | | refill_count <= 5
| | | | | | | refill_count <= 4: opana (269.0/82.0)
| | | | | | | refill_count > 4: butrans (63.0/19.0)
| | | | | | | refill_count > 5: opana (40.0/2.0)
| | | | | | AGEGRP > 2: opana (1696.0/471.0)
| | | | | REGION > 1
| | | | | AGEGRP <= 4
| | | | | | AGEGRP <= 1: butrans (29.0/7.0)
| | | | | | AGEGRP > 1
| | | | | | | REGION <= 3: opana (6446.0/2167.0)
```

SVM (linear kernel)

- Correctly Classified Instances 68111 61.3287 %
- Incorrectly Classified Instances 42948 38.6713 %
- Relative absolute error 79.3811 %

=== Confusion Matrix ===

	a	b	<-- classified as
64423	5		a = opana
42943	3688		b = butrans

- Attributes: 6

SEX, AGEGRP, REGION, Category, refill_count, ADMTYP

SVM (Radial basis kernel)

- Correctly Classified Instances 70067 63.0899 %
- Incorrectly Classified Instances 40992 36.9101 %
- Relative absolute error 75.7658 %

=== Confusion Matrix ===

a	b	<-- classified as
51284	13144	a = opana
27848	18783	b = butrans

- Attributes: 6

SEX, AGEGRP, REGION, Category, refill_count, ADMTYP

Random Forest

- Correctly Classified Instances 71437 64.3235 %
- Incorrectly Classified Instances 39622 35.6765 %
- Relative absolute error 83.7075 %

=== Confusion Matrix ===

a	b	<-- classified as
49766	14662	a = opana
24960	21671	b = butrans

- Attributes: 6

SEX, AGEGRP, REGION, Category, refill_count, ADMTYP

Logistic Regression

- Correctly Classified Instances 68890 62.0301 %
-
- Incorrectly Classified Instances 42169 37.9699 %
-
- Relative absolute error 89.0494 %

=== Confusion Matrix ===

a	b	<-- classified as
51544	12884	a = opana
29285	17346	b = butrans

- Attributes: 6

SEX, AGEGRP, REGION, Category, refill_count, ADMTYP

Thank You