

Table 3.11. RSD% for each of the calibration points of glimepiride

| Concentration (mg/ml) | Average area | RSD% |
|-----------------------|--------------|------|
| 0.5 | 125574 | 0.04 |
| 0.75 | 187045 | 0.03 |
| 1 | 260638 | 0.06 |
| 1.25 | 322943 | 0.25 |
| 1.5 | 388593 | 0.39 |

Table 3.12. RSD% for each of the calibration points of atorvastatin

| Concentration (mg/ml) | Average area | RSD% |
|-----------------------|--------------|------|
| 0.5 | 108163 | 0.21 |
| 0.75 | 163562 | 0.39 |
| 1.0 | 224521 | 0.26 |
| 1.25 | 273502 | 0.18 |
| 1.5 | 329891 | 0.46 |

When the calibration points were prepared in plasma and extracted, the linearity ranges were similar in the range of 0.5-1.5 mg/ml for glimepiride and amlodipine (Fig. 3.10, 3.11). For atorvastatin, the linearity range was from 0.75-1.5 mg/ml (Fig. 3.11). The R^2 value for all three were >0.99 . In addition the AUC for each plasma calibration point for glimepiride and amlodipine were much less than in diluent indicating matrix effect. However, the latter was not observed in atorvastatin. As for the %RSD, all values were less than 1% (Table 3.13, 3.14, 3.15).