Validation of Noncompartmental Analysis Performed by NonCompart R package

Sungpil Han shan@acp.kr

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1 Introduction

NonCompart R package (Bae 2018; Kim et al. 2018) can conduct a noncompartmental analysis as similar as possible to the most widely used commercial software for pharmacokinetic analysis, i.e. Phoenix® WinNonlin® (Certara USA 2018). This document provides validation of noncompartmental analysis performed by NonCompart R package version 0.4.1 as compared to the results from the commercial software, WinNonlin® version 6.3 and 7.0.

2 Results

A function, `Equal()` will return `TRUE` if there is no difference between results from NonCompart and WinNonlin.

```
# install.packages("NonCompart", repos="http://pmx.amc.seoul.kr")
library(NonCompart)
RptCfg = read.csv("RptCfg.csv", as.is=TRUE)

Equal = function(Wres, Rres, Tol=0.001)
{
```

```
  Wres[,"ID"] = as.character(Wres[,"Subject"])
  ColName0 = colnames(Rres)
  rownames(RptCfg) = RptCfg[,"PPTESTCD"]
  colnames(Rres) = c(ColName0[1], RptCfg[ColName0[-1],"WNL"])
  Inter = intersect(colnames(Wres), colnames(Rres))

  IsSame = TRUE
  for (i in 1:nrow(Wres)) {
    for (j in Inter) {
      R = as.numeric(Rres[i,j])
      W = as.numeric(Wres[i,j])
      if (W != 0) {
        if(abs((R - W)/W) > Tol) {
          print(Wres[i,j])
          print(Rres[i,j])
          IsSame = FALSE
        }
      }
    }
  }
  return(IsSame)
}
```

Eight comparison tests were performed using `Theoph` and `Indometh` default datasets. (Table 1) Detailed side-by-side comparison is in Appendix A.

Table 1: Description of settings for the noncompartmental analysis performed in WinNonlin and links to the raw data

No.	Dataset	Down	Route	Hyperlink
1	Theoph (n=12)	Linear	Extravascular	CSV
2	Theoph (n=12)	Log	Extravascular	CSV
3	Indometh (n=6)	Linear	IV Bolus	CSV
4	Indometh (n=6)	Log	IV Bolus	CSV
5	Indometh (n=6)	Linear	IV Infusion (0.25hr)	CSV
6	Indometh (n=6)	Log	IV Infusion (0.25hr)	CSV
7	Indometh (n=6)	Linear	Extravascular	CSV
8	Indometh (n=6)	Log	Extravascular	CSV

```
Theoph[,"Subject"] = as.numeric(as.character(Theoph[,"Subject"]))
Indometh[,"Subject"] = as.numeric(as.character(Indometh[,"Subject"]))

Wres1 = read.csv("Final_Parameters_Pivoted_Theoph_Linear.csv")
Rres1 = tblNCA(Theoph, "Subject", "Time", "conc", dose=320, concUnit="mg/L")
Equal(Wres1, Rres1)
```

```
## [1] TRUE
```

```
Wres2 = read.csv("Final_Parameters_Pivoted_Theoph_Log.csv")
Rres2 = tblNCA(Theoph, "Subject", "Time", "conc", dose=320, down="Log",
               concUnit="mg/L")
Equal(Wres2, Rres2)
```

```
## [1] TRUE
```

```
Wres3 = read.csv("Final_Parameters_Pivoted_Indometh_Linear.csv")
Rres3 = tblNCA(Indometh, "Subject", "time", "conc", dose=25, adm="Bolus",
               concUnit="mg/L", R2ADJ=0.8)
Equal(Wres3, Rres3)
```

```
## [1] TRUE
```

```
Wres4 = read.csv("Final_Parameters_Pivoted_Indometh_Log.csv")
Rres4 = tblNCA(Indometh, "Subject", "time", "conc", dose=25, adm="Bolus",
               down="Log", concUnit="mg/L", R2ADJ=0.8)
Equal(Wres4, Rres4)
```

```
## [1] TRUE
```

```
Wres5 = read.csv("Final_Parameters_Pivoted_Indometh_Linear_Infusion.csv")
Rres5 = tblNCA(Indometh, "Subject", "time", "conc", dose=25, adm="Infusion",
               dur=0.25, concUnit="mg/L", R2ADJ=0.8)
Equal(Wres5, Rres5)
```

```
## [1] TRUE
```

```
Wres6 = read.csv("Final_Parameters_Pivoted_Indometh_Log_Infusion.csv")
Rres6 = tblNCA(Indometh, "Subject", "time", "conc", dose=25, adm="Infusion",
               dur=0.25, down="Log", concUnit="mg/L", R2ADJ=0.8)
Equal(Wres6, Rres6)
```

```
## [1] TRUE
```

```
Wres7 = read.csv("Final_Parameters_Pivoted_Indometh_Linear_Wrong_Extravascular.csv")
Rres7 = tblNCA(Indometh, "Subject", "time", "conc", dose=25, concUnit="mg/L",
               R2ADJ=0.8)
Equal(Wres7, Rres7)
```

```
## [1] TRUE
```

```
Wres8 = read.csv("Final_Parameters_Pivoted_Indometh_Log_Wrong_Extravascular.csv")
Rres8 = tblNCA(Indometh, "Subject", "time", "conc", dose=25, down="Log",
               concUnit="mg/L", R2ADJ=0.8)
Equal(Wres8, Rres8)
```

```
## [1] TRUE
```

3 Conclusion

There is no discrepancy between results from NonCompart and WinNonlin. We also performed multiple analyses with the real clinical trial datasets and have found no differences (data not shown: confidential). Noncompartmental analysis performed by the open-source R package, NonCompart can be **qualified and validated** enough to acquire the identical results of the commercial software, WinNonlin.

Please report issues regarding validation of the R package to https://github.com/asancpt/NonCompart-tests/issues.

A Side-by-side comparison of results

```
library(dplyr)
library(tidyr)

table_wres_rres <- function(wres, rres, Caption){
  wres %>%
    gather(WNL, WinNonlin, -Subject) %>%
    left_join(RptCfg %>% select(PPTESTCD, WNL), by = "WNL") %>%
    left_join(rres %>% as.data.frame() %>% gather(PPTESTCD, NonCompart, -Subject),
              by = c("Subject", "PPTESTCD")) %>%
    select(Subject, PPTESTCD, WNL, NonCompart, WinNonlin) %>%
    mutate(NonCompart = as.numeric(NonCompart),
           WinNonlin = as.numeric(WinNonlin)) %>%
    mutate(Difference = ifelse(NonCompart - WinNonlin < 0.00001,
                               yes = 0, no = 'Larger than 0.00001')) %>%
    filter(!is.na(WinNonlin) & !is.na(NonCompart)) %>%
    knitr::kable(longtable = TRUE, booktabs = TRUE, format = "latex",
                 caption = Caption) %>%
    add_header_above(c(" ", "Pharmacokinetic Parameters" = 2, "Values" = 2, " ")) %>%
    kable_styling(latex_options = c("repeat_header"))

}
```

A.1 Test 1: Theoph (n=12), Linear, Extravascular

```
table_wres_rres(Wres1, Rres1,
                Caption = 'Theoph (n=12), Linear, Extravascular')
```

Table 2: Theoph (n=12), Linear, Extravascular

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
1	R2	Rsq	0.9999997	0.9999997	0
2	R2	Rsq	0.9971954	0.9971954	0
3	R2	Rsq	0.9993250	0.9993250	0
4	R2	Rsq	0.9989241	0.9989241	0
5	R2	Rsq	0.9986472	0.9986472	0
6	R2	Rsq	0.9982413	0.9982413	0
7	R2	Rsq	0.9986702	0.9986702	0
8	R2	Rsq	0.9910124	0.9910124	0
9	R2	Rsq	0.9994437	0.9994437	0
10	R2	Rsq	0.9995087	0.9995087	0
11	R2	Rsq	0.9999983	0.9999983	0
12	R2	Rsq	0.9993968	0.9993968	0
1	R2ADJ	Rsq_adjusted	0.9999995	0.9999995	0
2	R2ADJ	Rsq_adjusted	0.9957931	0.9957931	0
3	R2ADJ	Rsq_adjusted	0.9986499	0.9986499	0
4	R2ADJ	Rsq_adjusted	0.9978483	0.9978483	0

Table 2: Theoph (n=12), Linear, Extravascular *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
5	R2ADJ	Rsq_adjusted	0.9979708	0.9979708	0
6	R2ADJ	Rsq_adjusted	0.9978896	0.9978896	0
7	R2ADJ	Rsq_adjusted	0.9980053	0.9980053	0
8	R2ADJ	Rsq_adjusted	0.9887655	0.9887655	0
9	R2ADJ	Rsq_adjusted	0.9988873	0.9988873	0
10	R2ADJ	Rsq_adjusted	0.9990174	0.9990174	0
11	R2ADJ	Rsq_adjusted	0.9999965	0.9999965	0
12	R2ADJ	Rsq_adjusted	0.9987936	0.9987936	0
1	CORRXY	Corr_XY	-0.9999999	-0.9999999	0
2	CORRXY	Corr_XY	-0.9985967	-0.9985967	0
3	CORRXY	Corr_XY	-0.9996624	-0.9996624	0
4	CORRXY	Corr_XY	-0.9994619	-0.9994619	0
5	CORRXY	Corr_XY	-0.9993234	-0.9993234	0
6	CORRXY	Corr_XY	-0.9991203	-0.9991203	0
7	CORRXY	Corr_XY	-0.9993349	-0.9993349	0
8	CORRXY	Corr_XY	-0.9954961	-0.9954961	0
9	CORRXY	Corr_XY	-0.9997218	-0.9997218	0
10	CORRXY	Corr_XY	-0.9997543	-0.9997543	0
11	CORRXY	Corr_XY	-0.9999991	-0.9999991	0
12	CORRXY	Corr_XY	-0.9996984	-0.9996984	0
1	LAMZNPT	No_points_lambda_z	3.0000000	3.0000000	0
2	LAMZNPT	No_points_lambda_z	4.0000000	4.0000000	0
3	LAMZNPT	No_points_lambda_z	3.0000000	3.0000000	0
4	LAMZNPT	No_points_lambda_z	3.0000000	3.0000000	0
5	LAMZNPT	No_points_lambda_z	4.0000000	4.0000000	0
6	LAMZNPT	No_points_lambda_z	7.0000000	7.0000000	0
7	LAMZNPT	No_points_lambda_z	4.0000000	4.0000000	0
8	LAMZNPT	No_points_lambda_z	6.0000000	6.0000000	0
9	LAMZNPT	No_points_lambda_z	3.0000000	3.0000000	0
10	LAMZNPT	No_points_lambda_z	3.0000000	3.0000000	0
11	LAMZNPT	No_points_lambda_z	3.0000000	3.0000000	0
12	LAMZNPT	No_points_lambda_z	3.0000000	3.0000000	0
1	LAMZ	Lambda_z	0.0484570	0.0484570	0
2	LAMZ	Lambda_z	0.1040864	0.1040864	0
3	LAMZ	Lambda_z	0.1024443	0.1024443	0
4	LAMZ	Lambda_z	0.0992870	0.0992870	0
5	LAMZ	Lambda_z	0.0866189	0.0866189	0
6	LAMZ	Lambda_z	0.0877957	0.0877957	0
7	LAMZ	Lambda_z	0.0883365	0.0883365	0
8	LAMZ	Lambda_z	0.0814505	0.0814505	0
9	LAMZ	Lambda_z	0.0824586	0.0824586	0
10	LAMZ	Lambda_z	0.0749598	0.0749598	0
11	LAMZ	Lambda_z	0.0954586	0.0954586	0
12	LAMZ	Lambda_z	0.1102595	0.1102595	0
1	LAMZLL	Lambda_z_lower	9.0500000	9.0500000	0

Table 2: Theoph (n=12), Linear, Extravascular *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
2	LAMZLL	Lambda_z_lower	7.0300000	7.0300000	0
3	LAMZLL	Lambda_z_lower	9.0000000	9.0000000	0
4	LAMZLL	Lambda_z_lower	9.0200000	9.0200000	0
5	LAMZLL	Lambda_z_lower	7.0200000	7.0200000	0
6	LAMZLL	Lambda_z_lower	2.0300000	2.0300000	0
7	LAMZLL	Lambda_z_lower	6.9800000	6.9800000	0
8	LAMZLL	Lambda_z_lower	3.5300000	3.5300000	0
9	LAMZLL	Lambda_z_lower	8.8000000	8.8000000	0
10	LAMZLL	Lambda_z_lower	9.3800000	9.3800000	0
11	LAMZLL	Lambda_z_lower	9.0300000	9.0300000	0
12	LAMZLL	Lambda_z_lower	9.0300000	9.0300000	0
1	LAMZUL	Lambda_z_upper	24.3700000	24.3700000	0
2	LAMZUL	Lambda_z_upper	24.3000000	24.3000000	0
3	LAMZUL	Lambda_z_upper	24.1700000	24.1700000	0
4	LAMZUL	Lambda_z_upper	24.6500000	24.6500000	0
5	LAMZUL	Lambda_z_upper	24.3500000	24.3500000	0
6	LAMZUL	Lambda_z_upper	23.8500000	23.8500000	0
7	LAMZUL	Lambda_z_upper	24.2200000	24.2200000	0
8	LAMZUL	Lambda_z_upper	24.1200000	24.1200000	0
9	LAMZUL	Lambda_z_upper	24.4300000	24.4300000	0
10	LAMZUL	Lambda_z_upper	23.7000000	23.7000000	0
11	LAMZUL	Lambda_z_upper	24.0800000	24.0800000	0
12	LAMZUL	Lambda_z_upper	24.1500000	24.1500000	0
1	LAMZHL	HL_Lambda_z	14.3043776	14.3043776	0
2	LAMZHL	HL_Lambda_z	6.6593416	6.6593416	0
3	LAMZHL	HL_Lambda_z	6.7660874	6.7660874	0
4	LAMZHL	HL_Lambda_z	6.9812467	6.9812467	0
5	LAMZHL	HL_Lambda_z	8.0022640	8.0022640	0
6	LAMZHL	HL_Lambda_z	7.8949979	7.8949979	0
7	LAMZHL	HL_Lambda_z	7.8466683	7.8466683	0
8	LAMZHL	HL_Lambda_z	8.5100379	8.5100379	0
9	LAMZHL	HL_Lambda_z	8.4059988	8.4059988	0
10	LAMZHL	HL_Lambda_z	9.2469158	9.2469158	0
11	LAMZHL	HL_Lambda_z	7.2612365	7.2612365	0
12	LAMZHL	HL_Lambda_z	6.2865082	6.2865082	0
1	TLAG	Tlag	0.0000000	0.0000000	0
2	TLAG	Tlag	0.0000000	0.0000000	0
3	TLAG	Tlag	0.0000000	0.0000000	0
4	TLAG	Tlag	0.0000000	0.0000000	0
5	TLAG	Tlag	0.0000000	0.0000000	0
6	TLAG	Tlag	0.0000000	0.0000000	0
7	TLAG	Tlag	0.0000000	0.0000000	0
8	TLAG	Tlag	0.0000000	0.0000000	0
9	TLAG	Tlag	0.0000000	0.0000000	0
10	TLAG	Tlag	0.0000000	0.0000000	0

Table 2: Theoph (n=12), Linear, Extravascular *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
11	TLAG	Tlag	0.0000000	0.0000000	0
12	TLAG	Tlag	0.0000000	0.0000000	0
1	TMAX	Tmax	1.1200000	1.1200000	0
2	TMAX	Tmax	1.9200000	1.9200000	0
3	TMAX	Tmax	1.0200000	1.0200000	0
4	TMAX	Tmax	1.0700000	1.0700000	0
5	TMAX	Tmax	1.0000000	1.0000000	0
6	TMAX	Tmax	1.1500000	1.1500000	0
7	TMAX	Tmax	3.4800000	3.4800000	0
8	TMAX	Tmax	2.0200000	2.0200000	0
9	TMAX	Tmax	0.6300000	0.6300000	0
10	TMAX	Tmax	3.5500000	3.5500000	0
11	TMAX	Tmax	0.9800000	0.9800000	0
12	TMAX	Tmax	3.5200000	3.5200000	0
1	CMAX	Cmax	10.5000000	10.5000000	0
2	CMAX	Cmax	8.3300000	8.3300000	0
3	CMAX	Cmax	8.2000000	8.2000000	0
4	CMAX	Cmax	8.6000000	8.6000000	0
5	CMAX	Cmax	11.4000000	11.4000000	0
6	CMAX	Cmax	6.4400000	6.4400000	0
7	CMAX	Cmax	7.0900000	7.0900000	0
8	CMAX	Cmax	7.5600000	7.5600000	0
9	CMAX	Cmax	9.0300000	9.0300000	0
10	CMAX	Cmax	10.2100000	10.2100000	0
11	CMAX	Cmax	8.0000000	8.0000000	0
12	CMAX	Cmax	9.7500000	9.7500000	0
1	CMAXD	Cmax_D	0.0328125	0.0328125	0
2	CMAXD	Cmax_D	0.0260312	0.0260312	0
3	CMAXD	Cmax_D	0.0256250	0.0256250	0
4	CMAXD	Cmax_D	0.0268750	0.0268750	0
5	CMAXD	Cmax_D	0.0356250	0.0356250	0
6	CMAXD	Cmax_D	0.0201250	0.0201250	0
7	CMAXD	Cmax_D	0.0221562	0.0221562	0
8	CMAXD	Cmax_D	0.0236250	0.0236250	0
9	CMAXD	Cmax_D	0.0282188	0.0282188	0
10	CMAXD	Cmax_D	0.0319063	0.0319062	0
11	CMAXD	Cmax_D	0.0250000	0.0250000	0
12	CMAXD	Cmax_D	0.0304688	0.0304688	0
1	TLST	Tlast	24.3700000	24.3700000	0
2	TLST	Tlast	24.3000000	24.3000000	0
3	TLST	Tlast	24.1700000	24.1700000	0
4	TLST	Tlast	24.6500000	24.6500000	0
5	TLST	Tlast	24.3500000	24.3500000	0
6	TLST	Tlast	23.8500000	23.8500000	0
7	TLST	Tlast	24.2200000	24.2200000	0

Table 2: Theoph (n=12), Linear, Extravascular *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
8	TLST	Tlast	24.1200000	24.1200000	0
9	TLST	Tlast	24.4300000	24.4300000	0
10	TLST	Tlast	23.7000000	23.7000000	0
11	TLST	Tlast	24.0800000	24.0800000	0
12	TLST	Tlast	24.1500000	24.1500000	0
1	CLST	Clast	3.2800000	3.2800000	0
2	CLST	Clast	0.9000000	0.9000000	0
3	CLST	Clast	1.0500000	1.0500000	0
4	CLST	Clast	1.1500000	1.1500000	0
5	CLST	Clast	1.5700000	1.5700000	0
6	CLST	Clast	0.9200000	0.9200000	0
7	CLST	Clast	1.1500000	1.1500000	0
8	CLST	Clast	1.2500000	1.2500000	0
9	CLST	Clast	1.1200000	1.1200000	0
10	CLST	Clast	2.4200000	2.4200000	0
11	CLST	Clast	0.8600000	0.8600000	0
12	CLST	Clast	1.1700000	1.1700000	0
1	AUCLST	AUClast	148.9230500	148.9230500	0
2	AUCLST	AUClast	91.5268000	91.5268000	0
3	AUCLST	AUClast	99.2865000	99.2865000	0
4	AUCLST	AUClast	106.7963000	106.7963000	0
5	AUCLST	AUClast	121.2944000	121.2944000	0
6	AUCLST	AUClast	73.7755500	73.7755500	0
7	AUCLST	AUClast	90.7534000	90.7534000	0
8	AUCLST	AUClast	88.5599500	88.5599500	0
9	AUCLST	AUClast	86.3261500	86.3261500	0
10	AUCLST	AUClast	138.3681000	138.3681000	0
11	AUCLST	AUClast	80.0936000	80.0936000	0
12	AUCLST	AUClast	119.9775000	119.9775000	0
1	AUCALL	AUCall	148.9230500	148.9230500	0
2	AUCALL	AUCall	91.5268000	91.5268000	0
3	AUCALL	AUCall	99.2865000	99.2865000	0
4	AUCALL	AUCall	106.7963000	106.7963000	0
5	AUCALL	AUCall	121.2944000	121.2944000	0
6	AUCALL	AUCall	73.7755500	73.7755500	0
7	AUCALL	AUCall	90.7534000	90.7534000	0
8	AUCALL	AUCall	88.5599500	88.5599500	0
9	AUCALL	AUCall	86.3261500	86.3261500	0
10	AUCALL	AUCall	138.3681000	138.3681000	0
11	AUCALL	AUCall	80.0936000	80.0936000	0
12	AUCALL	AUCall	119.9775000	119.9775000	0
1	AUCIFO	AUCINF_obs	216.6119330	216.6119330	0
2	AUCIFO	AUCINF_obs	100.1734591	100.1734591	0
3	AUCIFO	AUCINF_obs	109.5359707	109.5359707	0
4	AUCIFO	AUCINF_obs	118.3788814	118.3788814	0

Table 2: Theoph (n=12), Linear, Extravascular *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
5	AUCIFO	AUCINF_obs	139.4197778	139.4197778	0
6	AUCIFO	AUCINF_obs	84.2544183	84.2544183	0
7	AUCIFO	AUCINF_obs	103.7718018	103.7718018	0
8	AUCIFO	AUCINF_obs	103.9066868	103.9066868	0
9	AUCIFO	AUCINF_obs	99.9087179	99.9087179	0
10	AUCIFO	AUCINF_obs	170.6520606	170.6520606	0
11	AUCIFO	AUCINF_obs	89.1027449	89.1027449	0
12	AUCIFO	AUCINF_obs	130.5888316	130.5888316	0
1	AUCIFOD	AUCINF_D_obs	0.6769123	0.6769123	0
2	AUCIFOD	AUCINF_D_obs	0.3130421	0.3130421	0
3	AUCIFOD	AUCINF_D_obs	0.3422999	0.3422999	0
4	AUCIFOD	AUCINF_D_obs	0.3699340	0.3699340	0
5	AUCIFOD	AUCINF_D_obs	0.4356868	0.4356868	0
6	AUCIFOD	AUCINF_D_obs	0.2632951	0.2632951	0
7	AUCIFOD	AUCINF_D_obs	0.3242869	0.3242869	0
8	AUCIFOD	AUCINF_D_obs	0.3247084	0.3247084	0
9	AUCIFOD	AUCINF_D_obs	0.3122147	0.3122147	0
10	AUCIFOD	AUCINF_D_obs	0.5332877	0.5332877	0
11	AUCIFOD	AUCINF_D_obs	0.2784461	0.2784461	0
12	AUCIFOD	AUCINF_D_obs	0.4080901	0.4080901	0
1	AUCPEO	AUC_.Extrap_obs	31.2489169	31.2489169	0
2	AUCPEO	AUC_.Extrap_obs	8.6316867	8.6316867	0
3	AUCPEO	AUC_.Extrap_obs	9.3571734	9.3571734	0
4	AUCPEO	AUC_.Extrap_obs	9.7843309	9.7843309	0
5	AUCPEO	AUC_.Extrap_obs	13.0005786	13.0005786	0
6	AUCPEO	AUC_.Extrap_obs	12.4371737	12.4371737	0
7	AUCPEO	AUC_.Extrap_obs	12.5452209	12.5452209	0
8	AUCPEO	AUC_.Extrap_obs	14.7697297	14.7697297	0
9	AUCPEO	AUC_.Extrap_obs	13.5949777	13.5949777	0
10	AUCPEO	AUC_.Extrap_obs	18.9180022	18.9180022	0
11	AUCPEO	AUC_.Extrap_obs	10.1109623	10.1109623	0
12	AUCPEO	AUC_.Extrap_obs	8.1257573	8.1257573	0
1	VZFO	Vz_F_obs	30.4867482	30.4867482	0
2	VZFO	Vz_F_obs	30.6904416	30.6904416	0
3	VZFO	Vz_F_obs	28.5170999	28.5170999	0
4	VZFO	Vz_F_obs	27.2259641	27.2259641	0
5	VZFO	Vz_F_obs	26.4979947	26.4979946	0
6	VZFO	Vz_F_obs	43.2597345	43.2597345	0
7	VZFO	Vz_F_obs	34.9084408	34.9084408	0
8	VZFO	Vz_F_obs	37.8105081	37.8105081	0
9	VZFO	Vz_F_obs	38.8427934	38.8427934	0
10	VZFO	Vz_F_obs	25.0155401	25.0155401	0
11	VZFO	Vz_F_obs	37.6221852	37.6221852	0
12	VZFO	Vz_F_obs	22.2242936	22.2242936	0
1	CLFO	Cl_F_obs	1.4772963	1.4772963	0

Table 2: Theoph (n=12), Linear, Extravascular *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
2	CLFO	Cl_F_obs	3.1944589	3.1944589	0
3	CLFO	Cl_F_obs	2.9214147	2.9214147	0
4	CLFO	Cl_F_obs	2.7031849	2.7031849	0
5	CLFO	Cl_F_obs	2.2952267	2.2952267	0
6	CLFO	Cl_F_obs	3.7980204	3.7980204	0
7	CLFO	Cl_F_obs	3.0836893	3.0836894	0
8	CLFO	Cl_F_obs	3.0796863	3.0796863	0
9	CLFO	Cl_F_obs	3.2029237	3.2029237	0
10	CLFO	Cl_F_obs	1.8751605	1.8751605	0
11	CLFO	Cl_F_obs	3.5913596	3.5913596	0
12	CLFO	Cl_F_obs	2.4504393	2.4504393	0
1	AUCIFP	AUCINF_pred	216.6149558	216.6149558	0
2	AUCIFP	AUCINF_pred	100.0643176	100.0643176	0
3	AUCIFP	AUCINF_pred	109.5857218	109.5857218	0
4	AUCIFP	AUCINF_pred	118.4435586	118.4435586	0
5	AUCIFP	AUCINF_pred	139.2546304	139.2546304	0
6	AUCIFP	AUCINF_pred	84.4966986	84.4966986	0
7	AUCIFP	AUCINF_pred	103.8931470	103.8931470	0
8	AUCIFP	AUCINF_pred	103.6430515	103.6430515	0
9	AUCIFP	AUCINF_pred	99.8660677	99.8660677	0
10	AUCIFP	AUCINF_pred	170.5679125	170.5679125	0
11	AUCIFP	AUCINF_pred	89.1007190	89.1007190	0
12	AUCIFP	AUCINF_pred	130.6390680	130.6390680	0
1	AUCIFPD	AUCINF_D_pred	0.6769217	0.6769217	0
2	AUCIFPD	AUCINF_D_pred	0.3127010	0.3127010	0
3	AUCIFPD	AUCINF_D_pred	0.3424554	0.3424554	0
4	AUCIFPD	AUCINF_D_pred	0.3701361	0.3701361	0
5	AUCIFPD	AUCINF_D_pred	0.4351707	0.4351707	0
6	AUCIFPD	AUCINF_D_pred	0.2640522	0.2640522	0
7	AUCIFPD	AUCINF_D_pred	0.3246661	0.3246661	0
8	AUCIFPD	AUCINF_D_pred	0.3238845	0.3238845	0
9	AUCIFPD	AUCINF_D_pred	0.3120815	0.3120815	0
10	AUCIFPD	AUCINF_D_pred	0.5330247	0.5330247	0
11	AUCIFPD	AUCINF_D_pred	0.2784397	0.2784397	0
12	AUCIFPD	AUCINF_D_pred	0.4082471	0.4082471	0
1	AUCPEP	AUC_.Extrap_pred	31.2498763	31.2498763	0
2	AUCPEP	AUC_.Extrap_pred	8.5320300	8.5320300	0
3	AUCPEP	AUC_.Extrap_pred	9.3983245	9.3983245	0
4	AUCPEP	AUC_.Extrap_pred	9.8335939	9.8335939	0
5	AUCPEP	AUC_.Extrap_pred	12.8974027	12.8974027	0
6	AUCPEP	AUC_.Extrap_pred	12.6882455	12.6882455	0
7	AUCPEP	AUC_.Extrap_pred	12.6473665	12.6473664	0
8	AUCPEP	AUC_.Extrap_pred	14.5529307	14.5529307	0
9	AUCPEP	AUC_.Extrap_pred	13.5580763	13.5580763	0
10	AUCPEP	AUC_.Extrap_pred	18.8780012	18.8780012	0

Table 2: Theoph (n=12), Linear, Extravascular *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
11	AUCPEP	AUC_.Extrap_pred	10.1089184	10.1089184	0
12	AUCPEP	AUC_.Extrap_pred	8.1610870	8.1610870	0
1	VZFP	Vz_F_pred	30.4863228	30.4863228	0
2	VZFP	Vz_F_pred	30.7239161	30.7239161	0
3	VZFP	Vz_F_pred	28.5041534	28.5041534	0
4	VZFP	Vz_F_pred	27.2110972	27.2110972	0
5	VZFP	Vz_F_pred	26.5294196	26.5294196	0
6	VZFP	Vz_F_pred	43.1356944	43.1356944	0
7	VZFP	Vz_F_pred	34.8676684	34.8676684	0
8	VZFP	Vz_F_pred	37.9066862	37.9066862	0
9	VZFP	Vz_F_pred	38.8593822	38.8593822	0
10	VZFP	Vz_F_pred	25.0278813	25.0278813	0
11	VZFP	Vz_F_pred	37.6230406	37.6230406	0
12	VZFP	Vz_F_pred	22.2157473	22.2157473	0
1	CLFP	Cl_F_pred	1.4772757	1.4772757	0
2	CLFP	Cl_F_pred	3.1979432	3.1979432	0
3	CLFP	Cl_F_pred	2.9200884	2.9200884	0
4	CLFP	Cl_F_pred	2.7017088	2.7017088	0
5	CLFP	Cl_F_pred	2.2979487	2.2979487	0
6	CLFP	Cl_F_pred	3.7871302	3.7871302	0
7	CLFP	Cl_F_pred	3.0800877	3.0800877	0
8	CLFP	Cl_F_pred	3.0875201	3.0875201	0
9	CLFP	Cl_F_pred	3.2042916	3.2042916	0
10	CLFP	Cl_F_pred	1.8760856	1.8760856	0
11	CLFP	Cl_F_pred	3.5914413	3.5914413	0
12	CLFP	Cl_F_pred	2.4494970	2.4494970	0
1	AUMCLST	AUMClast	1459.0711035	1459.0711040	0
2	AUMCLST	AUMClast	706.5865660	706.5865660	0
3	AUMCLST	AUMClast	803.1858700	803.1858700	0
4	AUMCLST	AUMClast	901.0842105	901.0842105	0
5	AUMCLST	AUMClast	1017.1143165	1017.1143170	0
6	AUMCLST	AUMClast	609.1523875	609.1523875	0
7	AUMCLST	AUMClast	782.4198600	782.4198600	0
8	AUMCLST	AUMClast	739.5345980	739.5345980	0
9	AUMCLST	AUMClast	705.2296255	705.2296255	0
10	AUMCLST	AUMClast	1278.1800420	1278.1800420	0
11	AUMCLST	AUMClast	617.2422125	617.2422125	0
12	AUMCLST	AUMClast	977.8807235	977.8807235	0
1	AUMCIFO	AUMCINF_obs	4505.5348194	4505.5348190	0
2	AUMCIFO	AUMCINF_obs	999.7722880	999.7722880	0
3	AUMCIFO	AUMCINF_obs	1150.9647687	1150.9647690	0
4	AUMCIFO	AUMCINF_obs	1303.2524014	1303.2524010	0
5	AUMCIFO	AUMCINF_obs	1667.7216119	1667.7216120	0
6	AUMCIFO	AUMCINF_obs	978.4284857	978.4284857	0
7	AUMCIFO	AUMCINF_obs	1245.0984083	1245.0984080	0

Table 2: Theoph (n=12), Linear, Extravascular *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
8	AUMCIFO	AUMCINF_obs	1298.1157547	1298.1157550	0
9	AUMCIFO	AUMCINF_obs	1201.7715381	1201.7715380	0
10	AUMCIFO	AUMCINF_obs	2473.9934274	2473.9934270	0
11	AUMCIFO	AUMCINF_obs	928.5599714	928.5599714	0
12	AUMCIFO	AUMCINF_obs	1330.3840024	1330.3840020	0
1	AUMCPEO	AUMC_.Extrap_obs	67.6160287	67.6160287	0
2	AUMCPEO	AUMC_.Extrap_obs	29.3252499	29.3252499	0
3	AUMCPEO	AUMC_.Extrap_obs	30.2162940	30.2162940	0
4	AUMCPEO	AUMC_.Extrap_obs	30.8588107	30.8588107	0
5	AUMCPEO	AUMC_.Extrap_obs	39.0117446	39.0117446	0
6	AUMCPEO	AUMC_.Extrap_obs	37.7417567	37.7417567	0
7	AUMCPEO	AUMC_.Extrap_obs	37.1599984	37.1599984	0
8	AUMCPEO	AUMC_.Extrap_obs	43.0301500	43.0301500	0
9	AUMCPEO	AUMC_.Extrap_obs	41.3174965	41.3174965	0
10	AUMCPEO	AUMC_.Extrap_obs	48.3353501	48.3353501	0
11	AUMCPEO	AUMC_.Extrap_obs	33.5269416	33.5269415	0
12	AUMCPEO	AUMC_.Extrap_obs	26.4963558	26.4963558	0
1	AUMCIFP	AUMCINF_pred	4505.6708646	4505.6708650	0
2	AUMCIFP	AUMCINF_pred	996.0715835	996.0715835	0
3	AUMCIFP	AUMCINF_pred	1152.6528903	1152.6528900	0
4	AUMCIFP	AUMCINF_pred	1305.4981092	1305.4981090	0
5	AUMCIFP	AUMCINF_pred	1661.7936744	1661.7936740	0
6	AUMCIFP	AUMCINF_pred	986.9664597	986.9664597	0
7	AUMCIFP	AUMCINF_pred	1249.4110601	1249.4110600	0
8	AUMCIFP	AUMCINF_pred	1288.5201162	1288.5201160	0
9	AUMCIFP	AUMCINF_pred	1200.2123597	1200.2123600	0
10	AUMCIFP	AUMCINF_pred	2470.8765418	2470.8765420	0
11	AUMCIFP	AUMCINF_pred	928.4899636	928.4899636	0
12	AUMCIFP	AUMCINF_pred	1332.0528341	1332.0528340	0
1	AUMCPEP	AUMC_.Extrap_pred	67.6170065	67.6170065	0
2	AUMCPEP	AUMC_.Extrap_pred	29.0626720	29.0626720	0
3	AUMCPEP	AUMC_.Extrap_pred	30.3184960	30.3184960	0
4	AUMCPEP	AUMC_.Extrap_pred	30.9777468	30.9777468	0
5	AUMCPEP	AUMC_.Extrap_pred	38.7941877	38.7941877	0
6	AUMCPEP	AUMC_.Extrap_pred	38.2803355	38.2803355	0
7	AUMCPEP	AUMC_.Extrap_pred	37.3769062	37.3769062	0
8	AUMCPEP	AUMC_.Extrap_pred	42.6058943	42.6058943	0
9	AUMCPEP	AUMC_.Extrap_pred	41.2412629	41.2412629	0
10	AUMCPEP	AUMC_.Extrap_pred	48.2701778	48.2701778	0
11	AUMCPEP	AUMC_.Extrap_pred	33.5219295	33.5219295	0
12	AUMCPEP	AUMC_.Extrap_pred	26.5884432	26.5884432	0
1	MRTEVLST	MRTlast	9.7974834	9.7974834	0
2	MRTEVLST	MRTlast	7.7199964	7.7199964	0
3	MRTEVLST	MRTlast	8.0895778	8.0895778	0
4	MRTEVLST	MRTlast	8.4374104	8.4374104	0

Table 2: Theoph (n=12), Linear, Extravascular *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
5	MRTEVLST	MRTlast	8.3855010	8.3855010	0
6	MRTEVLST	MRTlast	8.2568329	8.2568329	0
7	MRTEVLST	MRTlast	8.6213834	8.6213834	0
8	MRTEVLST	MRTlast	8.3506664	8.3506664	0
9	MRTEVLST	MRTlast	8.1693626	8.1693627	0
10	MRTEVLST	MRTlast	9.2375341	9.2375341	0
11	MRTEVLST	MRTlast	7.7065110	7.7065110	0
12	MRTEVLST	MRTlast	8.1505343	8.1505343	0
1	MRTEVIFO	MRTINF_obs	20.8000305	20.8000305	0
2	MRTEVIFO	MRTINF_obs	9.9804109	9.9804109	0
3	MRTEVIFO	MRTINF_obs	10.5076420	10.5076420	0
4	MRTEVIFO	MRTINF_obs	11.0091630	11.0091630	0
5	MRTEVIFO	MRTINF_obs	11.9618725	11.9618725	0
6	MRTEVIFO	MRTINF_obs	11.6127855	11.6127855	0
7	MRTEVIFO	MRTINF_obs	11.9984272	11.9984272	0
8	MRTEVIFO	MRTINF_obs	12.4930916	12.4930916	0
9	MRTEVIFO	MRTINF_obs	12.0286954	12.0286954	0
10	MRTEVIFO	MRTINF_obs	14.4972959	14.4972959	0
11	MRTEVIFO	MRTINF_obs	10.4212275	10.4212274	0
12	MRTEVIFO	MRTINF_obs	10.1875787	10.1875787	0
1	MRTEVIFP	MRTINF_pred	20.8003683	20.8003683	0
2	MRTEVIFP	MRTINF_pred	9.9543135	9.9543135	0
3	MRTEVIFP	MRTINF_pred	10.5182762	10.5182762	0
4	MRTEVIFP	MRTINF_pred	11.0221115	11.0221115	0
5	MRTEVIFP	MRTINF_pred	11.9334895	11.9334895	0
6	MRTEVIFP	MRTINF_pred	11.6805328	11.6805328	0
7	MRTEVIFP	MRTINF_pred	12.0259237	12.0259237	0
8	MRTEVIFP	MRTINF_pred	12.4322866	12.4322866	0
9	MRTEVIFP	MRTINF_pred	12.0182199	12.0182199	0
10	MRTEVIFP	MRTINF_pred	14.4861745	14.4861745	0
11	MRTEVIFP	MRTINF_pred	10.4206787	10.4206787	0
12	MRTEVIFP	MRTINF_pred	10.1964355	10.1964355	0

A.2 Test 2: Theoph (n=12), Log, Extravascular

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table_wres_rres(Wres2, Rres2,
                Caption = 'Theoph (n=12), Log, Extravascular')
```

Table 3: Theoph (n=12), Log, Extravascular

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
1	R2	Rsq	0.9999997	0.9999997	0

Table 3: Theoph (n=12), Log, Extravascular *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
2	R2	Rsq	0.9971954	0.9971954	0
3	R2	Rsq	0.9993250	0.9993250	0
4	R2	Rsq	0.9989241	0.9989241	0
5	R2	Rsq	0.9986472	0.9986472	0
6	R2	Rsq	0.9982413	0.9982413	0
7	R2	Rsq	0.9986702	0.9986702	0
8	R2	Rsq	0.9910124	0.9910124	0
9	R2	Rsq	0.9994437	0.9994437	0
10	R2	Rsq	0.9995087	0.9995087	0
11	R2	Rsq	0.9999983	0.9999983	0
12	R2	Rsq	0.9993968	0.9993968	0
1	R2ADJ	Rsq_adjusted	0.9999995	0.9999995	0
2	R2ADJ	Rsq_adjusted	0.9957931	0.9957931	0
3	R2ADJ	Rsq_adjusted	0.9986499	0.9986499	0
4	R2ADJ	Rsq_adjusted	0.9978483	0.9978483	0
5	R2ADJ	Rsq_adjusted	0.9979708	0.9979708	0
6	R2ADJ	Rsq_adjusted	0.9978896	0.9978896	0
7	R2ADJ	Rsq_adjusted	0.9980053	0.9980053	0
8	R2ADJ	Rsq_adjusted	0.9887655	0.9887655	0
9	R2ADJ	Rsq_adjusted	0.9988873	0.9988873	0
10	R2ADJ	Rsq_adjusted	0.9990174	0.9990174	0
11	R2ADJ	Rsq_adjusted	0.9999965	0.9999965	0
12	R2ADJ	Rsq_adjusted	0.9987936	0.9987936	0
1	CORRXY	Corr_XY	-0.9999999	-0.9999999	0
2	CORRXY	Corr_XY	-0.9985967	-0.9985967	0
3	CORRXY	Corr_XY	-0.9996624	-0.9996624	0
4	CORRXY	Corr_XY	-0.9994619	-0.9994619	0
5	CORRXY	Corr_XY	-0.9993234	-0.9993234	0
6	CORRXY	Corr_XY	-0.9991203	-0.9991203	0
7	CORRXY	Corr_XY	-0.9993349	-0.9993349	0
8	CORRXY	Corr_XY	-0.9954961	-0.9954961	0
9	CORRXY	Corr_XY	-0.9997218	-0.9997218	0
10	CORRXY	Corr_XY	-0.9997543	-0.9997543	0
11	CORRXY	Corr_XY	-0.9999991	-0.9999991	0
12	CORRXY	Corr_XY	-0.9996984	-0.9996984	0
1	LAMZNPT	No_points_lambda_z	3.0000000	3.0000000	0
2	LAMZNPT	No_points_lambda_z	4.0000000	4.0000000	0
3	LAMZNPT	No_points_lambda_z	3.0000000	3.0000000	0
4	LAMZNPT	No_points_lambda_z	3.0000000	3.0000000	0
5	LAMZNPT	No_points_lambda_z	4.0000000	4.0000000	0
6	LAMZNPT	No_points_lambda_z	7.0000000	7.0000000	0
7	LAMZNPT	No_points_lambda_z	4.0000000	4.0000000	0
8	LAMZNPT	No_points_lambda_z	6.0000000	6.0000000	0
9	LAMZNPT	No_points_lambda_z	3.0000000	3.0000000	0
10	LAMZNPT	No_points_lambda_z	3.0000000	3.0000000	0

Table 3: Theoph (n=12), Log, Extravascular *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
11	LAMZNPT	No_points_lambda_z	3.0000000	3.0000000	0
12	LAMZNPT	No_points_lambda_z	3.0000000	3.0000000	0
1	LAMZ	Lambda_z	0.0484570	0.0484570	0
2	LAMZ	Lambda_z	0.1040864	0.1040864	0
3	LAMZ	Lambda_z	0.1024443	0.1024443	0
4	LAMZ	Lambda_z	0.0992870	0.0992870	0
5	LAMZ	Lambda_z	0.0866189	0.0866189	0
6	LAMZ	Lambda_z	0.0877957	0.0877957	0
7	LAMZ	Lambda_z	0.0883365	0.0883365	0
8	LAMZ	Lambda_z	0.0814505	0.0814505	0
9	LAMZ	Lambda_z	0.0824586	0.0824586	0
10	LAMZ	Lambda_z	0.0749598	0.0749598	0
11	LAMZ	Lambda_z	0.0954586	0.0954586	0
12	LAMZ	Lambda_z	0.1102595	0.1102595	0
1	LAMZLL	Lambda_z_lower	9.0500000	9.0500000	0
2	LAMZLL	Lambda_z_lower	7.0300000	7.0300000	0
3	LAMZLL	Lambda_z_lower	9.0000000	9.0000000	0
4	LAMZLL	Lambda_z_lower	9.0200000	9.0200000	0
5	LAMZLL	Lambda_z_lower	7.0200000	7.0200000	0
6	LAMZLL	Lambda_z_lower	2.0300000	2.0300000	0
7	LAMZLL	Lambda_z_lower	6.9800000	6.9800000	0
8	LAMZLL	Lambda_z_lower	3.5300000	3.5300000	0
9	LAMZLL	Lambda_z_lower	8.8000000	8.8000000	0
10	LAMZLL	Lambda_z_lower	9.3800000	9.3800000	0
11	LAMZLL	Lambda_z_lower	9.0300000	9.0300000	0
12	LAMZLL	Lambda_z_lower	9.0300000	9.0300000	0
1	LAMZUL	Lambda_z_upper	24.3700000	24.3700000	0
2	LAMZUL	Lambda_z_upper	24.3000000	24.3000000	0
3	LAMZUL	Lambda_z_upper	24.1700000	24.1700000	0
4	LAMZUL	Lambda_z_upper	24.6500000	24.6500000	0
5	LAMZUL	Lambda_z_upper	24.3500000	24.3500000	0
6	LAMZUL	Lambda_z_upper	23.8500000	23.8500000	0
7	LAMZUL	Lambda_z_upper	24.2200000	24.2200000	0
8	LAMZUL	Lambda_z_upper	24.1200000	24.1200000	0
9	LAMZUL	Lambda_z_upper	24.4300000	24.4300000	0
10	LAMZUL	Lambda_z_upper	23.7000000	23.7000000	0
11	LAMZUL	Lambda_z_upper	24.0800000	24.0800000	0
12	LAMZUL	Lambda_z_upper	24.1500000	24.1500000	0
1	LAMZHL	HL_Lambda_z	14.3043776	14.3043776	0
2	LAMZHL	HL_Lambda_z	6.6593416	6.6593416	0
3	LAMZHL	HL_Lambda_z	6.7660874	6.7660874	0
4	LAMZHL	HL_Lambda_z	6.9812467	6.9812467	0
5	LAMZHL	HL_Lambda_z	8.0022640	8.0022640	0
6	LAMZHL	HL_Lambda_z	7.8949979	7.8949979	0
7	LAMZHL	HL_Lambda_z	7.8466683	7.8466683	0

Table 3: Theoph (n=12), Log, Extravascular *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
8	LAMZHL	HL_Lambda_z	8.5100379	8.5100379	0
9	LAMZHL	HL_Lambda_z	8.4059988	8.4059988	0
10	LAMZHL	HL_Lambda_z	9.2469158	9.2469158	0
11	LAMZHL	HL_Lambda_z	7.2612365	7.2612365	0
12	LAMZHL	HL_Lambda_z	6.2865082	6.2865082	0
1	TLAG	Tlag	0.0000000	0.0000000	0
2	TLAG	Tlag	0.0000000	0.0000000	0
3	TLAG	Tlag	0.0000000	0.0000000	0
4	TLAG	Tlag	0.0000000	0.0000000	0
5	TLAG	Tlag	0.0000000	0.0000000	0
6	TLAG	Tlag	0.0000000	0.0000000	0
7	TLAG	Tlag	0.0000000	0.0000000	0
8	TLAG	Tlag	0.0000000	0.0000000	0
9	TLAG	Tlag	0.0000000	0.0000000	0
10	TLAG	Tlag	0.0000000	0.0000000	0
11	TLAG	Tlag	0.0000000	0.0000000	0
12	TLAG	Tlag	0.0000000	0.0000000	0
1	TMAX	Tmax	1.1200000	1.1200000	0
2	TMAX	Tmax	1.9200000	1.9200000	0
3	TMAX	Tmax	1.0200000	1.0200000	0
4	TMAX	Tmax	1.0700000	1.0700000	0
5	TMAX	Tmax	1.0000000	1.0000000	0
6	TMAX	Tmax	1.1500000	1.1500000	0
7	TMAX	Tmax	3.4800000	3.4800000	0
8	TMAX	Tmax	2.0200000	2.0200000	0
9	TMAX	Tmax	0.6300000	0.6300000	0
10	TMAX	Tmax	3.5500000	3.5500000	0
11	TMAX	Tmax	0.9800000	0.9800000	0
12	TMAX	Tmax	3.5200000	3.5200000	0
1	CMAX	Cmax	10.5000000	10.5000000	0
2	CMAX	Cmax	8.3300000	8.3300000	0
3	CMAX	Cmax	8.2000000	8.2000000	0
4	CMAX	Cmax	8.6000000	8.6000000	0
5	CMAX	Cmax	11.4000000	11.4000000	0
6	CMAX	Cmax	6.4400000	6.4400000	0
7	CMAX	Cmax	7.0900000	7.0900000	0
8	CMAX	Cmax	7.5600000	7.5600000	0
9	CMAX	Cmax	9.0300000	9.0300000	0
10	CMAX	Cmax	10.2100000	10.2100000	0
11	CMAX	Cmax	8.0000000	8.0000000	0
12	CMAX	Cmax	9.7500000	9.7500000	0
1	CMAXD	Cmax_D	0.0328125	0.0328125	0
2	CMAXD	Cmax_D	0.0260312	0.0260312	0
3	CMAXD	Cmax_D	0.0256250	0.0256250	0
4	CMAXD	Cmax_D	0.0268750	0.0268750	0

Table 3: Theoph (n=12), Log, Extravascular *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
5	CMAXD	Cmax_D	0.0356250	0.0356250	0
6	CMAXD	Cmax_D	0.0201250	0.0201250	0
7	CMAXD	Cmax_D	0.0221562	0.0221562	0
8	CMAXD	Cmax_D	0.0236250	0.0236250	0
9	CMAXD	Cmax_D	0.0282188	0.0282188	0
10	CMAXD	Cmax_D	0.0319063	0.0319062	0
11	CMAXD	Cmax_D	0.0250000	0.0250000	0
12	CMAXD	Cmax_D	0.0304688	0.0304688	0
1	TLST	Tlast	24.3700000	24.3700000	0
2	TLST	Tlast	24.3000000	24.3000000	0
3	TLST	Tlast	24.1700000	24.1700000	0
4	TLST	Tlast	24.6500000	24.6500000	0
5	TLST	Tlast	24.3500000	24.3500000	0
6	TLST	Tlast	23.8500000	23.8500000	0
7	TLST	Tlast	24.2200000	24.2200000	0
8	TLST	Tlast	24.1200000	24.1200000	0
9	TLST	Tlast	24.4300000	24.4300000	0
10	TLST	Tlast	23.7000000	23.7000000	0
11	TLST	Tlast	24.0800000	24.0800000	0
12	TLST	Tlast	24.1500000	24.1500000	0
1	CLST	Clast	3.2800000	3.2800000	0
2	CLST	Clast	0.9000000	0.9000000	0
3	CLST	Clast	1.0500000	1.0500000	0
4	CLST	Clast	1.1500000	1.1500000	0
5	CLST	Clast	1.5700000	1.5700000	0
6	CLST	Clast	0.9200000	0.9200000	0
7	CLST	Clast	1.1500000	1.1500000	0
8	CLST	Clast	1.2500000	1.2500000	0
9	CLST	Clast	1.1200000	1.1200000	0
10	CLST	Clast	2.4200000	2.4200000	0
11	CLST	Clast	0.8600000	0.8600000	0
12	CLST	Clast	1.1700000	1.1700000	0
1	AUCLST	AUClast	147.2347485	147.2347485	0
2	AUCLST	AUClast	88.7312755	88.7312755	0
3	AUCLST	AUClast	95.8781978	95.8781978	0
4	AUCLST	AUClast	102.6336232	102.6336232	0
5	AUCLST	AUClast	118.1793538	118.1793538	0
6	AUCLST	AUClast	71.6970150	71.6970150	0
7	AUCLST	AUClast	87.9692274	87.9692274	0
8	AUCLST	AUClast	86.8065635	86.8065635	0
9	AUCLST	AUClast	83.9374360	83.9374360	0
10	AUCLST	AUClast	135.5760701	135.5760701	0
11	AUCLST	AUClast	77.8934723	77.8934723	0
12	AUCLST	AUClast	115.2202082	115.2202082	0
1	AUCALL	AUCall	147.2347485	147.2347485	0

Table 3: Theoph (n=12), Log, Extravascular *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
2	AUCALL	AUCall	88.7312755	88.7312755	0
3	AUCALL	AUCall	95.8781978	95.8781978	0
4	AUCALL	AUCall	102.6336232	102.6336232	0
5	AUCALL	AUCall	118.1793538	118.1793538	0
6	AUCALL	AUCall	71.6970150	71.6970150	0
7	AUCALL	AUCall	87.9692274	87.9692274	0
8	AUCALL	AUCall	86.8065635	86.8065635	0
9	AUCALL	AUCall	83.9374360	83.9374360	0
10	AUCALL	AUCall	135.5760701	135.5760701	0
11	AUCALL	AUCall	77.8934723	77.8934723	0
12	AUCALL	AUCall	115.2202082	115.2202082	0
1	AUCIFO	AUCINF_obs	214.9236316	214.9236316	0
2	AUCIFO	AUCINF_obs	97.3779346	97.3779346	0
3	AUCIFO	AUCINF_obs	106.1276685	106.1276685	0
4	AUCIFO	AUCINF_obs	114.2162046	114.2162046	0
5	AUCIFO	AUCINF_obs	136.3047316	136.3047316	0
6	AUCIFO	AUCINF_obs	82.1758833	82.1758833	0
7	AUCIFO	AUCINF_obs	100.9876292	100.9876292	0
8	AUCIFO	AUCINF_obs	102.1533003	102.1533003	0
9	AUCIFO	AUCINF_obs	97.5200039	97.5200039	0
10	AUCIFO	AUCINF_obs	167.8600307	167.8600307	0
11	AUCIFO	AUCINF_obs	86.9026173	86.9026173	0
12	AUCIFO	AUCINF_obs	125.8315397	125.8315397	0
1	AUCIFOD	AUCINF_D_obs	0.6716363	0.6716363	0
2	AUCIFOD	AUCINF_D_obs	0.3043060	0.3043060	0
3	AUCIFOD	AUCINF_D_obs	0.3316490	0.3316490	0
4	AUCIFOD	AUCINF_D_obs	0.3569256	0.3569256	0
5	AUCIFOD	AUCINF_D_obs	0.4259523	0.4259523	0
6	AUCIFOD	AUCINF_D_obs	0.2567996	0.2567996	0
7	AUCIFOD	AUCINF_D_obs	0.3155863	0.3155863	0
8	AUCIFOD	AUCINF_D_obs	0.3192291	0.3192291	0
9	AUCIFOD	AUCINF_D_obs	0.3047500	0.3047500	0
10	AUCIFOD	AUCINF_D_obs	0.5245626	0.5245626	0
11	AUCIFOD	AUCINF_D_obs	0.2715707	0.2715707	0
12	AUCIFOD	AUCINF_D_obs	0.3932236	0.3932236	0
1	AUCPEO	AUC_.Extrap_obs	31.4943883	31.4943883	0
2	AUCPEO	AUC_.Extrap_obs	8.8794850	8.8794850	0
3	AUCPEO	AUC_.Extrap_obs	9.6576801	9.6576801	0
4	AUCPEO	AUC_.Extrap_obs	10.1409266	10.1409266	0
5	AUCPEO	AUC_.Extrap_obs	13.2976879	13.2976879	0
6	AUCPEO	AUC_.Extrap_obs	12.7517562	12.7517562	0
7	AUCPEO	AUC_.Extrap_obs	12.8910857	12.8910857	0
8	AUCPEO	AUC_.Extrap_obs	15.0232413	15.0232413	0
9	AUCPEO	AUC_.Extrap_obs	13.9279813	13.9279813	0
10	AUCPEO	AUC_.Extrap_obs	19.2326669	19.2326669	0

Table 3: Theoph (n=12), Log, Extravascular *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
11	AUCPEO	AUC_.Extrap_obs	10.3669431	10.3669432	0
12	AUCPEO	AUC_.Extrap_obs	8.4329665	8.4329665	0
1	VZFO	Vz_F_obs	30.7262325	30.7262325	0
2	VZFO	Vz_F_obs	31.5715024	31.5715024	0
3	VZFO	Vz_F_obs	29.4329299	29.4329299	0
4	VZFO	Vz_F_obs	28.2182304	28.2182304	0
5	VZFO	Vz_F_obs	27.1035678	27.1035677	0
6	VZFO	Vz_F_obs	44.3539348	44.3539348	0
7	VZFO	Vz_F_obs	35.8708471	35.8708471	0
8	VZFO	Vz_F_obs	38.4594978	38.4594978	0
9	VZFO	Vz_F_obs	39.7942323	39.7942323	0
10	VZFO	Vz_F_obs	25.4316257	25.4316257	0
11	VZFO	Vz_F_obs	38.5746722	38.5746722	0
12	VZFO	Vz_F_obs	23.0645237	23.0645237	0
1	CLFO	Cl_F_obs	1.4889010	1.4889010	0
2	CLFO	Cl_F_obs	3.2861654	3.2861654	0
3	CLFO	Cl_F_obs	3.0152363	3.0152363	0
4	CLFO	Cl_F_obs	2.8017040	2.8017040	0
5	CLFO	Cl_F_obs	2.3476808	2.3476808	0
6	CLFO	Cl_F_obs	3.8940865	3.8940865	0
7	CLFO	Cl_F_obs	3.1687049	3.1687049	0
8	CLFO	Cl_F_obs	3.1325469	3.1325469	0
9	CLFO	Cl_F_obs	3.2813780	3.2813780	0
10	CLFO	Cl_F_obs	1.9063502	1.9063502	0
11	CLFO	Cl_F_obs	3.6822827	3.6822827	0
12	CLFO	Cl_F_obs	2.5430826	2.5430826	0
1	AUCIFP	AUCINF_pred	214.9266543	214.9266543	0
2	AUCIFP	AUCINF_pred	97.2687931	97.2687931	0
3	AUCIFP	AUCINF_pred	106.1774195	106.1774195	0
4	AUCIFP	AUCINF_pred	114.2808818	114.2808818	0
5	AUCIFP	AUCINF_pred	136.1395842	136.1395842	0
6	AUCIFP	AUCINF_pred	82.4181636	82.4181636	0
7	AUCIFP	AUCINF_pred	101.1089745	101.1089745	0
8	AUCIFP	AUCINF_pred	101.8896649	101.8896649	0
9	AUCIFP	AUCINF_pred	97.4773537	97.4773537	0
10	AUCIFP	AUCINF_pred	167.7758826	167.7758826	0
11	AUCIFP	AUCINF_pred	86.9005913	86.9005913	0
12	AUCIFP	AUCINF_pred	125.8817762	125.8817762	0
1	AUCIFPD	AUCINF_D_pred	0.6716458	0.6716458	0
2	AUCIFPD	AUCINF_D_pred	0.3039650	0.3039650	0
3	AUCIFPD	AUCINF_D_pred	0.3318044	0.3318044	0
4	AUCIFPD	AUCINF_D_pred	0.3571278	0.3571278	0
5	AUCIFPD	AUCINF_D_pred	0.4254362	0.4254362	0
6	AUCIFPD	AUCINF_D_pred	0.2575568	0.2575568	0
7	AUCIFPD	AUCINF_D_pred	0.3159655	0.3159655	0

Table 3: Theoph (n=12), Log, Extravascular *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
8	AUCIFPD	AUCINF_D_pred	0.3184052	0.3184052	0
9	AUCIFPD	AUCINF_D_pred	0.3046167	0.3046167	0
10	AUCIFPD	AUCINF_D_pred	0.5242996	0.5242996	0
11	AUCIFPD	AUCINF_D_pred	0.2715643	0.2715643	0
12	AUCIFPD	AUCINF_D_pred	0.3933806	0.3933806	0
1	AUCPEP	AUC_.Extrap_pred	31.4953518	31.4953518	0
2	AUCPEP	AUC_.Extrap_pred	8.7772423	8.7772423	0
3	AUCPEP	AUC_.Extrap_pred	9.7000114	9.7000114	0
4	AUCPEP	AUC_.Extrap_pred	10.1917822	10.1917822	0
5	AUCPEP	AUC_.Extrap_pred	13.1925116	13.1925116	0
6	AUCPEP	AUC_.Extrap_pred	13.0082352	13.0082352	0
7	AUCPEP	AUC_.Extrap_pred	12.9956288	12.9956288	0
8	AUCPEP	AUC_.Extrap_pred	14.8033674	14.8033674	0
9	AUCPEP	AUC_.Extrap_pred	13.8903213	13.8903213	0
10	AUCPEP	AUC_.Extrap_pred	19.1921580	19.1921580	0
11	AUCPEP	AUC_.Extrap_pred	10.3648535	10.3648535	0
12	AUCPEP	AUC_.Extrap_pred	8.4695087	8.4695087	0
1	VZFP	Vz_F_pred	30.7258003	30.7258003	0
2	VZFP	Vz_F_pred	31.6069275	31.6069275	0
3	VZFP	Vz_F_pred	29.4191386	29.4191386	0
4	VZFP	Vz_F_pred	28.2022603	28.2022603	0
5	VZFP	Vz_F_pred	27.1364464	27.1364464	0
6	VZFP	Vz_F_pred	44.2235499	44.2235499	0
7	VZFP	Vz_F_pred	35.8277969	35.8277969	0
8	VZFP	Vz_F_pred	38.5590101	38.5590101	0
9	VZFP	Vz_F_pred	39.8116439	39.8116439	0
10	VZFP	Vz_F_pred	25.4443810	25.4443809	0
11	VZFP	Vz_F_pred	38.5755715	38.5755715	0
12	VZFP	Vz_F_pred	23.0553192	23.0553192	0
1	CLFP	Cl_F_pred	1.4888800	1.4888800	0
2	CLFP	Cl_F_pred	3.2898527	3.2898527	0
3	CLFP	Cl_F_pred	3.0138235	3.0138235	0
4	CLFP	Cl_F_pred	2.8001184	2.8001184	0
5	CLFP	Cl_F_pred	2.3505287	2.3505287	0
6	CLFP	Cl_F_pred	3.8826393	3.8826393	0
7	CLFP	Cl_F_pred	3.1649020	3.1649020	0
8	CLFP	Cl_F_pred	3.1406522	3.1406522	0
9	CLFP	Cl_F_pred	3.2828138	3.2828138	0
10	CLFP	Cl_F_pred	1.9073063	1.9073063	0
11	CLFP	Cl_F_pred	3.6823685	3.6823685	0
12	CLFP	Cl_F_pred	2.5420677	2.5420677	0
1	AUMCLST	AUMClast	1499.1290852	1499.1290850	0
2	AUMCLST	AUMClast	716.2787279	716.2787279	0
3	AUMCLST	AUMClast	810.8726830	810.8726830	0
4	AUMCLST	AUMClast	911.7828093	911.7828093	0

Table 3: Theoph (n=12), Log, Extravascular *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
5	AUMCLST	AUMClast	1038.8799844	1038.8799840	0
6	AUMCLST	AUMClast	618.6659191	618.6659191	0
7	AUMCLST	AUMClast	795.6267785	795.6267785	0
8	AUMCLST	AUMClast	756.3619816	756.3619816	0
9	AUMCLST	AUMClast	723.3794155	723.3794155	0
10	AUMCLST	AUMClast	1306.7406149	1306.7406150	0
11	AUMCLST	AUMClast	626.6357849	626.6357849	0
12	AUMCLST	AUMClast	982.6343023	982.6343023	0
1	AUMCIFO	AUMCINF_obs	4545.5928011	4545.5928010	0
2	AUMCIFO	AUMCINF_obs	1009.4644499	1009.4644500	0
3	AUMCIFO	AUMCINF_obs	1158.6515817	1158.6515820	0
4	AUMCIFO	AUMCINF_obs	1313.9510002	1313.9510000	0
5	AUMCIFO	AUMCINF_obs	1689.4872798	1689.4872800	0
6	AUMCIFO	AUMCINF_obs	987.9420173	987.9420173	0
7	AUMCIFO	AUMCINF_obs	1258.3053268	1258.3053270	0
8	AUMCIFO	AUMCINF_obs	1314.9431383	1314.9431380	0
9	AUMCIFO	AUMCINF_obs	1219.9213281	1219.9213280	0
10	AUMCIFO	AUMCINF_obs	2502.5540002	2502.5540000	0
11	AUMCIFO	AUMCINF_obs	937.9535438	937.9535438	0
12	AUMCIFO	AUMCINF_obs	1335.1375811	1335.1375810	0
1	AUMCPEO	AUMC_.Extrap_obs	67.0201632	67.0201632	0
2	AUMCPEO	AUMC_.Extrap_obs	29.0436897	29.0436897	0
3	AUMCPEO	AUMC_.Extrap_obs	30.0158308	30.0158308	0
4	AUMCPEO	AUMC_.Extrap_obs	30.6075486	30.6075486	0
5	AUMCPEO	AUMC_.Extrap_obs	38.5091562	38.5091562	0
6	AUMCPEO	AUMC_.Extrap_obs	37.3783169	37.3783169	0
7	AUMCPEO	AUMC_.Extrap_obs	36.7699745	36.7699745	0
8	AUMCPEO	AUMC_.Extrap_obs	42.4794913	42.4794914	0
9	AUMCPEO	AUMC_.Extrap_obs	40.7027815	40.7027815	0
10	AUMCPEO	AUMC_.Extrap_obs	47.7837196	47.7837196	0
11	AUMCPEO	AUMC_.Extrap_obs	33.1911704	33.1911704	0
12	AUMCPEO	AUMC_.Extrap_obs	26.4020191	26.4020191	0
1	AUMCIFP	AUMCINF_pred	4545.7288462	4545.7288460	0
2	AUMCIFP	AUMCINF_pred	1005.7637454	1005.7637450	0
3	AUMCIFP	AUMCINF_pred	1160.3397033	1160.3397030	0
4	AUMCIFP	AUMCINF_pred	1316.1967080	1316.1967080	0
5	AUMCIFP	AUMCINF_pred	1683.5593423	1683.5593420	0
6	AUMCIFP	AUMCINF_pred	996.4799913	996.4799913	0
7	AUMCIFP	AUMCINF_pred	1262.6179786	1262.6179790	0
8	AUMCIFP	AUMCINF_pred	1305.3474998	1305.3475000	0
9	AUMCIFP	AUMCINF_pred	1218.3621498	1218.3621500	0
10	AUMCIFP	AUMCINF_pred	2499.4371146	2499.4371150	0
11	AUMCIFP	AUMCINF_pred	937.8835360	937.8835360	0
12	AUMCIFP	AUMCINF_pred	1336.8064129	1336.8064130	0
1	AUMCPEP	AUMC_.Extrap_pred	67.0211503	67.0211503	0

Table 3: Theoph (n=12), Log, Extravascular *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
2	AUMCPEP	AUMC_.Extrap_pred	28.7826061	28.7826061	0
3	AUMCPEP	AUMC_.Extrap_pred	30.1176474	30.1176474	0
4	AUMCPEP	AUMC_.Extrap_pred	30.7259467	30.7259467	0
5	AUMCPEP	AUMC_.Extrap_pred	38.2926424	38.2926424	0
6	AUMCPEP	AUMC_.Extrap_pred	37.9148679	37.9148679	0
7	AUMCPEP	AUMC_.Extrap_pred	36.9859457	36.9859457	0
8	AUMCPEP	AUMC_.Extrap_pred	42.0566568	42.0566568	0
9	AUMCPEP	AUMC_.Extrap_pred	40.6268969	40.6268969	0
10	AUMCPEP	AUMC_.Extrap_pred	47.7186040	47.7186040	0
11	AUMCPEP	AUMC_.Extrap_pred	33.1861835	33.1861835	0
12	AUMCPEP	AUMC_.Extrap_pred	26.4938967	26.4938967	0
1	MRTEVLST	MRTlast	10.1818973	10.1818973	0
2	MRTEVLST	MRTlast	8.0724494	8.0724494	0
3	MRTEVLST	MRTlast	8.4573209	8.4573209	0
4	MRTEVLST	MRTlast	8.8838607	8.8838607	0
5	MRTEVLST	MRTlast	8.7907063	8.7907063	0
6	MRTEVLST	MRTlast	8.6288937	8.6288937	0
7	MRTEVLST	MRTlast	9.0443761	9.0443761	0
8	MRTEVLST	MRTlast	8.7131889	8.7131889	0
9	MRTEVLST	MRTlast	8.6180785	8.6180785	0
10	MRTEVLST	MRTlast	9.6384311	9.6384311	0
11	MRTEVLST	MRTlast	8.0447792	8.0447792	0
12	MRTEVLST	MRTlast	8.5283156	8.5283156	0
1	MRTEVIFO	MRTINF_obs	21.1498046	21.1498045	0
2	MRTEVIFO	MRTINF_obs	10.3664599	10.3664599	0
3	MRTEVIFO	MRTINF_obs	10.9175260	10.9175260	0
4	MRTEVIFO	MRTINF_obs	11.5040681	11.5040681	0
5	MRTEVIFO	MRTINF_obs	12.3949276	12.3949276	0
6	MRTEVIFO	MRTINF_obs	12.0222866	12.0222866	0
7	MRTEVIFO	MRTINF_obs	12.4599947	12.4599947	0
8	MRTEVIFO	MRTINF_obs	12.8722531	12.8722531	0
9	MRTEVIFO	MRTINF_obs	12.5094471	12.5094471	0
10	MRTEVIFO	MRTINF_obs	14.9085758	14.9085758	0
11	MRTEVIFO	MRTINF_obs	10.7931564	10.7931564	0
12	MRTEVIFO	MRTINF_obs	10.6105161	10.6105161	0
1	MRTEVIFP	MRTINF_pred	21.1501401	21.1501401	0
2	MRTEVIFP	MRTINF_pred	10.3400455	10.3400455	0
3	MRTEVIFP	MRTINF_pred	10.9283095	10.9283095	0
4	MRTEVIFP	MRTINF_pred	11.5172082	11.5172082	0
5	MRTEVIFP	MRTINF_pred	12.3664205	12.3664205	0
6	MRTEVIFP	MRTINF_pred	12.0905386	12.0905386	0
7	MRTEVIFP	MRTINF_pred	12.4876944	12.4876944	0
8	MRTEVIFP	MRTINF_pred	12.8113828	12.8113828	0
9	MRTEVIFP	MRTINF_pred	12.4989252	12.4989252	0
10	MRTEVIFP	MRTINF_pred	14.8974756	14.8974756	0

Table 3: Theoph (n=12), Log, Extravascular *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
11	MRTEVIFP	MRTINF_pred	10.7926025	10.7926025	0
12	MRTEVIFP	MRTINF_pred	10.6195388	10.6195388	0

A.3 Test 3: Indometh (n=6), Linear, IV Bolus

```
table_wres_rres(Wres3, Rres3,
                Caption = 'Indometh (n=6), Linear, IV Bolus')
```

Table 4: Indometh (n=6), Linear, IV Bolus

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
1	R2	Rsq	0.9970667	0.9970667	0
2	R2	Rsq	0.9476691	0.9476691	0
3	R2	Rsq	0.8758261	0.8758261	0
4	R2	Rsq	0.8728249	0.8728249	0
5	R2	Rsq	0.8752442	0.8752442	0
6	R2	Rsq	0.9039538	0.9039538	0
1	R2ADJ	Rsq_adjusted	0.9941335	0.9941335	0
2	R2ADJ	Rsq_adjusted	0.9401933	0.9401933	0
3	R2ADJ	Rsq_adjusted	0.8603043	0.8603043	0
4	R2ADJ	Rsq_adjusted	0.8586943	0.8586943	0
5	R2ADJ	Rsq_adjusted	0.8544516	0.8544516	0
6	R2ADJ	Rsq_adjusted	0.8902329	0.8902329	0
1	CORRXY	Corr_XY	-0.9985323	-0.9985323	0
2	CORRXY	Corr_XY	-0.9734830	-0.9734830	0
3	CORRXY	Corr_XY	-0.9358558	-0.9358558	0
4	CORRXY	Corr_XY	-0.9342510	-0.9342510	0
5	CORRXY	Corr_XY	-0.9355449	-0.9355449	0
6	CORRXY	Corr_XY	-0.9507649	-0.9507649	0
1	LAMZNPT	No_points_lambda_z	3.0000000	3.0000000	0
2	LAMZNPT	No_points_lambda_z	9.0000000	9.0000000	0
3	LAMZNPT	No_points_lambda_z	10.0000000	10.0000000	0
4	LAMZNPT	No_points_lambda_z	11.0000000	11.0000000	0
5	LAMZNPT	No_points_lambda_z	8.0000000	8.0000000	0
6	LAMZNPT	No_points_lambda_z	9.0000000	9.0000000	0
1	LAMZ	Lambda_z	0.1583205	0.1583205	0
2	LAMZ	Lambda_z	0.3022800	0.3022800	0
3	LAMZ	Lambda_z	0.4218926	0.4218926	0
4	LAMZ	Lambda_z	0.4554455	0.4554455	0
5	LAMZ	Lambda_z	0.2527478	0.2527478	0
6	LAMZ	Lambda_z	0.3535205	0.3535205	0
1	LAMZLL	Lambda_z_lower	5.0000000	5.0000000	0

Table 4: Indometh (n=6), Linear, IV Bolus *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
2	LAMZLL	Lambda_z_lower	0.7500000	0.7500000	0
3	LAMZLL	Lambda_z_lower	0.5000000	0.5000000	0
4	LAMZLL	Lambda_z_lower	0.2500000	0.2500000	0
5	LAMZLL	Lambda_z_lower	1.0000000	1.0000000	0
6	LAMZLL	Lambda_z_lower	0.7500000	0.7500000	0
1	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
2	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
3	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
4	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
5	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
6	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
1	LAMZHL	HL_Lambda_z	4.3781270	4.3781270	0
2	LAMZHL	HL_Lambda_z	2.2930632	2.2930632	0
3	LAMZHL	HL_Lambda_z	1.6429468	1.6429468	0
4	LAMZHL	HL_Lambda_z	1.5219104	1.5219104	0
5	LAMZHL	HL_Lambda_z	2.7424461	2.7424461	0
6	LAMZHL	HL_Lambda_z	1.9606986	1.9606986	0
1	TMAX	Tmax	0.2500000	0.2500000	0
2	TMAX	Tmax	0.2500000	0.2500000	0
3	TMAX	Tmax	0.2500000	0.2500000	0
4	TMAX	Tmax	0.2500000	0.2500000	0
5	TMAX	Tmax	0.2500000	0.2500000	0
6	TMAX	Tmax	0.2500000	0.2500000	0
1	CMAX	Cmax	1.5000000	1.5000000	0
2	CMAX	Cmax	2.0300000	2.0300000	0
3	CMAX	Cmax	2.7200000	2.7200000	0
4	CMAX	Cmax	1.8500000	1.8500000	0
5	CMAX	Cmax	2.0500000	2.0500000	0
6	CMAX	Cmax	2.3100000	2.3100000	0
1	CMAXD	Cmax_D	0.0600000	0.0600000	0
2	CMAXD	Cmax_D	0.0812000	0.0812000	0
3	CMAXD	Cmax_D	0.1088000	0.1088000	0
4	CMAXD	Cmax_D	0.0740000	0.0740000	0
5	CMAXD	Cmax_D	0.0820000	0.0820000	0
6	CMAXD	Cmax_D	0.0924000	0.0924000	0
1	C0	C0	2.3936170	2.3936170	0
2	C0	C0	2.5281595	2.5281595	0
3	C0	C0	4.9653691	4.9653691	0
4	C0	C0	2.4622302	2.4622302	0
5	C0	C0	4.0408654	4.0408654	0
6	C0	C0	3.7056250	3.7056250	0
1	TLST	Tlast	8.0000000	8.0000000	0
2	TLST	Tlast	8.0000000	8.0000000	0
3	TLST	Tlast	8.0000000	8.0000000	0
4	TLST	Tlast	8.0000000	8.0000000	0

Table 4: Indometh (n=6), Linear, IV Bolus *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
5	TLST	Tlast	8.0000000	8.0000000	0
6	TLST	Tlast	8.0000000	8.0000000	0
1	CLST	Clast	0.0500000	0.0500000	0
2	CLST	Clast	0.0800000	0.0800000	0
3	CLST	Clast	0.0800000	0.0800000	0
4	CLST	Clast	0.0700000	0.0700000	0
5	CLST	Clast	0.0600000	0.0600000	0
6	CLST	Clast	0.0900000	0.0900000	0
1	AUCLST	AUClast	2.0404521	2.0404521	0
2	AUCLST	AUClast	3.2485199	3.2485199	0
3	AUCLST	AUClast	3.5544211	3.5544211	0
4	AUCLST	AUClast	2.7852788	2.7852788	0
5	AUCLST	AUClast	2.4588582	2.4588582	0
6	AUCLST	AUClast	3.3357031	3.3357031	0
1	AUCALL	AUCall	2.0404521	2.0404521	0
2	AUCALL	AUCall	3.2485199	3.2485199	0
3	AUCALL	AUCall	3.5544211	3.5544211	0
4	AUCALL	AUCall	2.7852788	2.7852788	0
5	AUCALL	AUCall	2.4588582	2.4588582	0
6	AUCALL	AUCall	3.3357031	3.3357031	0
1	AUCIFO	AUCINF_obs	2.3562672	2.3562672	0
2	AUCIFO	AUCINF_obs	3.5131752	3.5131752	0
3	AUCIFO	AUCINF_obs	3.7440428	3.7440428	0
4	AUCIFO	AUCINF_obs	2.9389745	2.9389745	0
5	AUCIFO	AUCINF_obs	2.6962490	2.6962490	0
6	AUCIFO	AUCINF_obs	3.5902852	3.5902852	0
1	AUCIFOD	AUCINF_D_obs	0.0942507	0.0942507	0
2	AUCIFOD	AUCINF_D_obs	0.1405270	0.1405270	0
3	AUCIFOD	AUCINF_D_obs	0.1497617	0.1497617	0
4	AUCIFOD	AUCINF_D_obs	0.1175590	0.1175590	0
5	AUCIFOD	AUCINF_D_obs	0.1078500	0.1078500	0
6	AUCIFOD	AUCINF_D_obs	0.1436114	0.1436114	0
1	AUCPEO	AUC_.Extrap_obs	13.4031956	13.4031956	0
2	AUCPEO	AUC_.Extrap_obs	7.5332215	7.5332215	0
3	AUCPEO	AUC_.Extrap_obs	5.0646241	5.0646241	0
4	AUCPEO	AUC_.Extrap_obs	5.2295685	5.2295685	0
5	AUCPEO	AUC_.Extrap_obs	8.8044838	8.8044838	0
6	AUCPEO	AUC_.Extrap_obs	7.0908603	7.0908603	0
1	AUCPBEO	AUC_.Back_Ext_obs	20.6556421	20.6556421	0
2	AUCPBEO	AUC_.Back_Ext_obs	16.2180906	16.2180906	0
3	AUCPBEO	AUC_.Back_Ext_obs	25.6586578	25.6586578	0
4	AUCPBEO	AUC_.Back_Ext_obs	18.3407098	18.3407098	0
5	AUCPBEO	AUC_.Back_Ext_obs	28.2376805	28.2376805	0
6	AUCPBEO	AUC_.Back_Ext_obs	20.9441054	20.9441054	0
1	VZO	Vz_obs	67.0159780	67.0159780	0

Table 4: Indometh (n=6), Linear, IV Bolus *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
2	VZO	Vz_obs	23.5413171	23.5413171	0
3	VZO	Vz_obs	15.8269504	15.8269504	0
4	VZO	Vz_obs	18.6770303	18.6770303	0
5	VZO	Vz_obs	36.6853493	36.6853493	0
6	VZO	Vz_obs	19.6968341	19.6968341	0
1	CLO	Cl_obs	10.6100020	10.6100020	0
2	CLO	Cl_obs	7.1160698	7.1160698	0
3	CLO	Cl_obs	6.6772740	6.6772740	0
4	CLO	Cl_obs	8.5063686	8.5063686	0
5	CLO	Cl_obs	9.2721407	9.2721407	0
6	CLO	Cl_obs	6.9632351	6.9632351	0
1	AUCIFP	AUCINF_pred	2.3578369	2.3578369	0
2	AUCIFP	AUCINF_pred	3.4958268	3.4958268	0
3	AUCIFP	AUCINF_pred	3.6491670	3.6491670	0
4	AUCIFP	AUCINF_pred	2.8554521	2.8554521	0
5	AUCIFP	AUCINF_pred	2.6549884	2.6549884	0
6	AUCIFP	AUCINF_pred	3.4947956	3.4947956	0
1	AUCIFPD	AUCINF_D_pred	0.0943135	0.0943135	0
2	AUCIFPD	AUCINF_D_pred	0.1398331	0.1398331	0
3	AUCIFPD	AUCINF_D_pred	0.1459667	0.1459667	0
4	AUCIFPD	AUCINF_D_pred	0.1142181	0.1142181	0
5	AUCIFPD	AUCINF_D_pred	0.1061995	0.1061995	0
6	AUCIFPD	AUCINF_D_pred	0.1397918	0.1397918	0
1	AUCPEP	AUC_.Extrap_pred	13.4608442	13.4608442	0
2	AUCPEP	AUC_.Extrap_pred	7.0743442	7.0743442	0
3	AUCPEP	AUC_.Extrap_pred	2.5963692	2.5963692	0
4	AUCPEP	AUC_.Extrap_pred	2.4575198	2.4575198	0
5	AUCPEP	AUC_.Extrap_pred	7.3872362	7.3872362	0
6	AUCPEP	AUC_.Extrap_pred	4.5522694	4.5522694	0
1	AUCPBEP	AUC_.Back_Ext_pred	20.6418914	20.6418914	0
2	AUCPBEP	AUC_.Back_Ext_pred	16.2985748	16.2985748	0
3	AUCPBEP	AUC_.Back_Ext_pred	26.3257654	26.3257654	0
4	AUCPBEP	AUC_.Back_Ext_pred	18.8771782	18.8771782	0
5	AUCPBEP	AUC_.Back_Ext_pred	28.6765156	28.6765156	0
6	AUCPBEP	AUC_.Back_Ext_pred	21.5163690	21.5163690	0
1	VZP	Vz_pred	66.9713647	66.9713647	0
2	VZP	Vz_pred	23.6581437	23.6581437	0
3	VZP	Vz_pred	16.2384403	16.2384403	0
4	VZP	Vz_pred	19.2233361	19.2233361	0
5	VZP	Vz_pred	37.2554675	37.2554675	0
6	VZP	Vz_pred	20.2350180	20.2350180	0
1	CLP	Cl_pred	10.6029388	10.6029388	0
2	CLP	Cl_pred	7.1513841	7.1513841	0
3	CLP	Cl_pred	6.8508786	6.8508786	0
4	CLP	Cl_pred	8.7551811	8.7551811	0

Table 4: Indometh (n=6), Linear, IV Bolus *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
5	CLP	Cl_pred	9.4162369	9.4162369	0
6	CLP	Cl_pred	7.1534941	7.1534941	0
1	AUMCLST	AUMClast	3.2712500	3.2712500	0
2	AUMCLST	AUMClast	6.3987500	6.3987500	0
3	AUMCLST	AUMClast	5.0062500	5.0062500	0
4	AUMCLST	AUMClast	4.3818750	4.3818750	0
5	AUMCLST	AUMClast	3.7075000	3.7075000	0
6	AUMCLST	AUMClast	5.5325000	5.5325000	0
1	AUMCIFO	AUMCINF_obs	7.7925545	7.7925545	0
2	AUMCIFO	AUMCINF_obs	9.3915223	9.3915223	0
3	AUMCIFO	AUMCINF_obs	6.9726784	6.9726784	0
4	AUMCIFO	AUMCINF_obs	5.9489028	5.9489028	0
5	AUMCIFO	AUMCINF_obs	6.5458663	6.5458663	0
6	AUMCIFO	AUMCINF_obs	8.2892908	8.2892908	0
1	AUMCPEO	AUMC_.Extrap_obs	58.0208261	58.0208261	0
2	AUMCPEO	AUMC_.Extrap_obs	31.8667432	31.8667432	0
3	AUMCPEO	AUMC_.Extrap_obs	28.2019090	28.2019090	0
4	AUMCPEO	AUMC_.Extrap_obs	26.3414589	26.3414589	0
5	AUMCPEO	AUMC_.Extrap_obs	43.3612023	43.3612023	0
6	AUMCPEO	AUMC_.Extrap_obs	33.2572574	33.2572574	0
1	AUMCIFP	AUMCINF_pred	7.8150259	7.8150259	0
2	AUMCIFP	AUMCINF_pred	9.1953427	9.1953427	0
3	AUMCIFP	AUMCINF_pred	5.9887901	5.9887901	0
4	AUMCIFP	AUMCINF_pred	5.0973376	5.0973376	0
5	AUMCIFP	AUMCINF_pred	6.0525342	6.0525342	0
6	AUMCIFP	AUMCINF_pred	7.2552635	7.2552635	0
1	AUMCPEP	AUMC_.Extrap_pred	58.1415337	58.1415337	0
2	AUMCPEP	AUMC_.Extrap_pred	30.4131425	30.4131425	0
3	AUMCPEP	AUMC_.Extrap_pred	16.4063210	16.4063210	0
4	AUMCPEP	AUMC_.Extrap_pred	14.0360055	14.0360055	0
5	AUMCPEP	AUMC_.Extrap_pred	38.7446663	38.7446663	0
6	AUMCPEP	AUMC_.Extrap_pred	23.7450164	23.7450164	0
1	MRTIVLST	MRTlast	1.6031986	1.6031986	0
2	MRTIVLST	MRTlast	1.9697432	1.9697432	0
3	MRTIVLST	MRTlast	1.4084572	1.4084572	0
4	MRTIVLST	MRTlast	1.5732267	1.5732267	0
5	MRTIVLST	MRTlast	1.5078137	1.5078137	0
6	MRTIVLST	MRTlast	1.6585709	1.6585709	0
1	MRTIVIFO	MRTINF_obs	3.3071607	3.3071607	0
2	MRTIVIFO	MRTINF_obs	2.6732291	2.6732291	0
3	MRTIVIFO	MRTINF_obs	1.8623394	1.8623394	0
4	MRTIVIFO	MRTINF_obs	2.0241424	2.0241424	0
5	MRTIVIFO	MRTINF_obs	2.4277678	2.4277678	0
6	MRTIVIFO	MRTINF_obs	2.3088112	2.3088112	0
1	MRTIVIFP	MRTINF_pred	3.3144897	3.3144897	0

Table 4: Indometh (n=6), Linear, IV Bolus *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
2	MRTIVIFP	MRTINF_pred	2.6303771	2.6303771	0
3	MRTIVIFP	MRTINF_pred	1.6411390	1.6411390	0
4	MRTIVIFP	MRTINF_pred	1.7851245	1.7851245	0
5	MRTIVIFP	MRTINF_pred	2.2796838	2.2796838	0
6	MRTIVIFP	MRTINF_pred	2.0760194	2.0760194	0
1	VSSO	Vss_obs	35.0889819	35.0889819	0
2	VSSO	Vss_obs	19.0228851	19.0228851	0
3	VSSO	Vss_obs	12.4353504	12.4353504	0
4	VSSO	Vss_obs	17.2181012	17.2181012	0
5	VSSO	Vss_obs	22.5106044	22.5106044	0
6	VSSO	Vss_obs	16.0767951	16.0767951	0
1	VSSP	Vss_pred	35.1433309	35.1433309	0
2	VSSP	Vss_pred	18.8108371	18.8108371	0
3	VSSP	Vss_pred	11.2432438	11.2432438	0
4	VSSP	Vss_pred	15.6290886	15.6290886	0
5	VSSP	Vss_pred	21.4660427	21.4660427	0
6	VSSP	Vss_pred	14.8507925	14.8507925	0

A.4 Test 4: Indometh (n=6), Log, IV Bolus

```
table_wres_rres(Wres4, Rres4,
                Caption = 'Indometh (n=6), Log, IV Bolus')
```

Table 5: Indometh (n=6), Log, IV Bolus

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
1	R2	Rsq	0.9970667	0.9970667	0
2	R2	Rsq	0.9476691	0.9476691	0
3	R2	Rsq	0.8758261	0.8758261	0
4	R2	Rsq	0.8728249	0.8728249	0
5	R2	Rsq	0.8752442	0.8752442	0
6	R2	Rsq	0.9039538	0.9039538	0
1	R2ADJ	Rsq_adjusted	0.9941335	0.9941335	0
2	R2ADJ	Rsq_adjusted	0.9401933	0.9401933	0
3	R2ADJ	Rsq_adjusted	0.8603043	0.8603043	0
4	R2ADJ	Rsq_adjusted	0.8586943	0.8586943	0
5	R2ADJ	Rsq_adjusted	0.8544516	0.8544516	0
6	R2ADJ	Rsq_adjusted	0.8902329	0.8902329	0
1	CORRXY	Corr_XY	-0.9985323	-0.9985323	0
2	CORRXY	Corr_XY	-0.9734830	-0.9734830	0
3	CORRXY	Corr_XY	-0.9358558	-0.9358558	0
4	CORRXY	Corr_XY	-0.9342510	-0.9342510	0

Table 5: Indometh (n=6), Log, IV Bolus *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
5	CORRXY	Corr_XY	-0.9355449	-0.9355449	0
6	CORRXY	Corr_XY	-0.9507649	-0.9507649	0
1	LAMZNPT	No_points_lambda_z	3.0000000	3.0000000	0
2	LAMZNPT	No_points_lambda_z	9.0000000	9.0000000	0
3	LAMZNPT	No_points_lambda_z	10.0000000	10.0000000	0
4	LAMZNPT	No_points_lambda_z	11.0000000	11.0000000	0
5	LAMZNPT	No_points_lambda_z	8.0000000	8.0000000	0
6	LAMZNPT	No_points_lambda_z	9.0000000	9.0000000	0
1	LAMZ	Lambda_z	0.1583205	0.1583205	0
2	LAMZ	Lambda_z	0.3022800	0.3022800	0
3	LAMZ	Lambda_z	0.4218926	0.4218926	0
4	LAMZ	Lambda_z	0.4554455	0.4554455	0
5	LAMZ	Lambda_z	0.2527478	0.2527478	0
6	LAMZ	Lambda_z	0.3535205	0.3535205	0
1	LAMZLL	Lambda_z_lower	5.0000000	5.0000000	0
2	LAMZLL	Lambda_z_lower	0.7500000	0.7500000	0
3	LAMZLL	Lambda_z_lower	0.5000000	0.5000000	0
4	LAMZLL	Lambda_z_lower	0.2500000	0.2500000	0
5	LAMZLL	Lambda_z_lower	1.0000000	1.0000000	0
6	LAMZLL	Lambda_z_lower	0.7500000	0.7500000	0
1	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
2	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
3	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
4	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
5	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
6	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
1	LAMZHL	HL_Lambda_z	4.3781270	4.3781270	0
2	LAMZHL	HL_Lambda_z	2.2930632	2.2930632	0
3	LAMZHL	HL_Lambda_z	1.6429468	1.6429468	0
4	LAMZHL	HL_Lambda_z	1.5219104	1.5219104	0
5	LAMZHL	HL_Lambda_z	2.7424461	2.7424461	0
6	LAMZHL	HL_Lambda_z	1.9606986	1.9606986	0
1	TMAX	Tmax	0.2500000	0.2500000	0
2	TMAX	Tmax	0.2500000	0.2500000	0
3	TMAX	Tmax	0.2500000	0.2500000	0
4	TMAX	Tmax	0.2500000	0.2500000	0
5	TMAX	Tmax	0.2500000	0.2500000	0
6	TMAX	Tmax	0.2500000	0.2500000	0
1	CMAX	Cmax	1.5000000	1.5000000	0
2	CMAX	Cmax	2.0300000	2.0300000	0
3	CMAX	Cmax	2.7200000	2.7200000	0
4	CMAX	Cmax	1.8500000	1.8500000	0
5	CMAX	Cmax	2.0500000	2.0500000	0
6	CMAX	Cmax	2.3100000	2.3100000	0
1	CMAXD	Cmax_D	0.0600000	0.0600000	0

Table 5: Indometh (n=6), Log, IV Bolus *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
2	CMAXD	Cmax_D	0.0812000	0.0812000	0
3	CMAXD	Cmax_D	0.1088000	0.1088000	0
4	CMAXD	Cmax_D	0.0740000	0.0740000	0
5	CMAXD	Cmax_D	0.0820000	0.0820000	0
6	CMAXD	Cmax_D	0.0924000	0.0924000	0
1	C0	C0	2.3936170	2.3936170	0
2	C0	C0	2.5281595	2.5281595	0
3	C0	C0	4.9653691	4.9653691	0
4	C0	C0	2.4622302	2.4622302	0
5	C0	C0	4.0408654	4.0408654	0
6	C0	C0	3.7056250	3.7056250	0
1	TLST	Tlast	8.0000000	8.0000000	0
2	TLST	Tlast	8.0000000	8.0000000	0
3	TLST	Tlast	8.0000000	8.0000000	0
4	TLST	Tlast	8.0000000	8.0000000	0
5	TLST	Tlast	8.0000000	8.0000000	0
6	TLST	Tlast	8.0000000	8.0000000	0
1	CLST	Clast	0.0500000	0.0500000	0
2	CLST	Clast	0.0800000	0.0800000	0
3	CLST	Clast	0.0800000	0.0800000	0
4	CLST	Clast	0.0700000	0.0700000	0
5	CLST	Clast	0.0600000	0.0600000	0
6	CLST	Clast	0.0900000	0.0900000	0
1	AUCLST	AUClast	2.0098984	2.0098984	0
2	AUCLST	AUClast	3.2028878	3.2028878	0
3	AUCLST	AUClast	3.4743971	3.4743971	0
4	AUCLST	AUClast	2.7483832	2.7483832	0
5	AUCLST	AUClast	2.3983736	2.3983736	0
6	AUCLST	AUClast	3.2908266	3.2908266	0
1	AUCALL	AUCall	2.0098984	2.0098984	0
2	AUCALL	AUCall	3.2028878	3.2028878	0
3	AUCALL	AUCall	3.4743971	3.4743971	0
4	AUCALL	AUCall	2.7483832	2.7483832	0
5	AUCALL	AUCall	2.3983736	2.3983736	0
6	AUCALL	AUCall	3.2908266	3.2908266	0
1	AUCIFO	AUCINF_obs	2.3257135	2.3257135	0
2	AUCIFO	AUCINF_obs	3.4675431	3.4675431	0
3	AUCIFO	AUCINF_obs	3.6640188	3.6640188	0
4	AUCIFO	AUCINF_obs	2.9020789	2.9020789	0
5	AUCIFO	AUCINF_obs	2.6357645	2.6357645	0
6	AUCIFO	AUCINF_obs	3.5454087	3.5454087	0
1	AUCIFOD	AUCINF_D_obs	0.0930285	0.0930285	0
2	AUCIFOD	AUCINF_D_obs	0.1387017	0.1387017	0
3	AUCIFOD	AUCINF_D_obs	0.1465608	0.1465608	0
4	AUCIFOD	AUCINF_D_obs	0.1160832	0.1160832	0

Table 5: Indometh (n=6), Log, IV Bolus *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
5	AUCIFOD	AUCINF_D_obs	0.1054306	0.1054306	0
6	AUCIFOD	AUCINF_D_obs	0.1418163	0.1418163	0
1	AUCPEO	AUC_.Extrap_obs	13.5792780	13.5792780	0
2	AUCPEO	AUC_.Extrap_obs	7.6323571	7.6323571	0
3	AUCPEO	AUC_.Extrap_obs	5.1752381	5.1752381	0
4	AUCPEO	AUC_.Extrap_obs	5.2960545	5.2960545	0
5	AUCPEO	AUC_.Extrap_obs	9.0065258	9.0065258	0
6	AUCPEO	AUC_.Extrap_obs	7.1806138	7.1806138	0
1	AUCPBEO	AUC_.Back_Ext_obs	20.5542573	20.5542573	0
2	AUCPBEO	AUC_.Back_Ext_obs	16.3658871	16.3658871	0
3	AUCPBEO	AUC_.Back_Ext_obs	25.4552663	25.4552663	0
4	AUCPBEO	AUC_.Back_Ext_obs	18.4484084	18.4484084	0
5	AUCPBEO	AUC_.Back_Ext_obs	27.8259014	27.8259014	0
6	AUCPBEO	AUC_.Back_Ext_obs	20.8230657	20.8230657	0
1	VZO	Vz_obs	67.8963898	67.8963898	0
2	VZO	Vz_obs	23.8511160	23.8511160	0
3	VZO	Vz_obs	16.1726192	16.1726192	0
4	VZO	Vz_obs	18.9144805	18.9144805	0
5	VZO	Vz_obs	37.5271908	37.5271908	0
6	VZO	Vz_obs	19.9461495	19.9461495	0
1	CLO	Cl_obs	10.7493892	10.7493892	0
2	CLO	Cl_obs	7.2097158	7.2097158	0
3	CLO	Cl_obs	6.8231092	6.8231092	0
4	CLO	Cl_obs	8.6145142	8.6145142	0
5	CLO	Cl_obs	9.4849143	9.4849143	0
6	CLO	Cl_obs	7.0513732	7.0513732	0
1	AUCIFP	AUCINF_pred	2.3272832	2.3272832	0
2	AUCIFP	AUCINF_pred	3.4501946	3.4501946	0
3	AUCIFP	AUCINF_pred	3.5691429	3.5691429	0
4	AUCIFP	AUCINF_pred	2.8185565	2.8185565	0
5	AUCIFP	AUCINF_pred	2.5945039	2.5945039	0
6	AUCIFP	AUCINF_pred	3.4499191	3.4499191	0
1	AUCIFPD	AUCINF_D_pred	0.0930913	0.0930913	0
2	AUCIFPD	AUCINF_D_pred	0.1380078	0.1380078	0
3	AUCIFPD	AUCINF_D_pred	0.1427657	0.1427657	0
4	AUCIFPD	AUCINF_D_pred	0.1127423	0.1127423	0
5	AUCIFPD	AUCINF_D_pred	0.1037802	0.1037802	0
6	AUCIFPD	AUCINF_D_pred	0.1379968	0.1379968	0
1	AUCPEP	AUC_.Extrap_pred	13.6375646	13.6375646	0
2	AUCPEP	AUC_.Extrap_pred	7.1679092	7.1679092	0
3	AUCPEP	AUC_.Extrap_pred	2.6545826	2.6545826	0
4	AUCPEP	AUC_.Extrap_pred	2.4896893	2.4896893	0
5	AUCPEP	AUC_.Extrap_pred	7.5594516	7.5594516	0
6	AUCPEP	AUC_.Extrap_pred	4.6114853	4.6114853	0
1	AUCPBEP	AUC_.Back_Ext_pred	20.5403945	20.5403945	0

Table 5: Indometh (n=6), Log, IV Bolus *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
2	AUCPBEP	AUC_.Back_Ext_pred	16.4481790	16.4481790	0
3	AUCPBEP	AUC_.Back_Ext_pred	26.1319245	26.1319245	0
4	AUCPBEP	AUC_.Back_Ext_pred	18.9950907	18.9950907	0
5	AUCPBEP	AUC_.Back_Ext_pred	28.2684182	28.2684182	0
6	AUCPBEP	AUC_.Back_Ext_pred	21.3994230	21.3994230	0
1	VZP	Vz_pred	67.8505969	67.8505969	0
2	VZP	Vz_pred	23.9710455	23.9710455	0
3	VZP	Vz_pred	16.6025238	16.6025238	0
4	VZP	Vz_pred	19.4749739	19.4749739	0
5	VZP	Vz_pred	38.1239878	38.1239878	0
6	VZP	Vz_pred	20.4982349	20.4982349	0
1	CLP	Cl_pred	10.7421392	10.7421392	0
2	CLP	Cl_pred	7.2459681	7.2459681	0
3	CLP	Cl_pred	7.0044827	7.0044827	0
4	CLP	Cl_pred	8.8697884	8.8697884	0
5	CLP	Cl_pred	9.6357534	9.6357534	0
6	CLP	Cl_pred	7.2465467	7.2465467	0
1	AUMCLST	AUMClast	3.3047961	3.3047961	0
2	AUMCLST	AUMClast	6.4131687	6.4131687	0
3	AUMCLST	AUMClast	5.0552993	5.0552993	0
4	AUMCLST	AUMClast	4.4049718	4.4049718	0
5	AUMCLST	AUMClast	3.7472994	3.7472994	0
6	AUMCLST	AUMClast	5.5904206	5.5904206	0
1	AUMCIFO	AUMCINF_obs	7.8261005	7.8261005	0
2	AUMCIFO	AUMCINF_obs	9.4059410	9.4059410	0
3	AUMCIFO	AUMCINF_obs	7.0217278	7.0217278	0
4	AUMCIFO	AUMCINF_obs	5.9719996	5.9719996	0
5	AUMCIFO	AUMCINF_obs	6.5856658	6.5856658	0
6	AUMCIFO	AUMCINF_obs	8.3472113	8.3472113	0
1	AUMCPEO	AUMC_.Extrap_obs	57.7721236	57.7721236	0
2	AUMCPEO	AUMC_.Extrap_obs	31.8178935	31.8178935	0
3	AUMCPEO	AUMC_.Extrap_obs	28.0049084	28.0049084	0
4	AUMCPEO	AUMC_.Extrap_obs	26.2395827	26.2395827	0
5	AUMCPEO	AUMC_.Extrap_obs	43.0991557	43.0991557	0
6	AUMCPEO	AUMC_.Extrap_obs	33.0264883	33.0264883	0
1	AUMCIFP	AUMCINF_pred	7.8485720	7.8485720	0
2	AUMCIFP	AUMCINF_pred	9.2097614	9.2097614	0
3	AUMCIFP	AUMCINF_pred	6.0378395	6.0378395	0
4	AUMCIFP	AUMCINF_pred	5.1204344	5.1204344	0
5	AUMCIFP	AUMCINF_pred	6.0923336	6.0923336	0
6	AUMCIFP	AUMCINF_pred	7.3131841	7.3131841	0
1	AUMCPEP	AUMC_.Extrap_pred	57.8930274	57.8930274	0
2	AUMCPEP	AUMC_.Extrap_pred	30.3655279	30.3655279	0
3	AUMCPEP	AUMC_.Extrap_pred	16.2730417	16.2730417	0
4	AUMCPEP	AUMC_.Extrap_pred	13.9726930	13.9726930	0

Table 5: Indometh (n=6), Log, IV Bolus *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
5	AUMCPEP	AUMC_.Extrap_pred	38.4915588	38.4915588	0
6	AUMCPEP	AUMC_.Extrap_pred	23.5569554	23.5569554	0
1	MRTIVLST	MRTlast	1.6442602	1.6442602	0
2	MRTIVLST	MRTlast	2.0023083	2.0023083	0
3	MRTIVLST	MRTlast	1.4550148	1.4550148	0
4	MRTIVLST	MRTlast	1.6027502	1.6027502	0
5	MRTIVLST	MRTlast	1.5624335	1.5624335	0
6	MRTIVLST	MRTlast	1.6987892	1.6987892	0
1	MRTIVIFO	MRTINF_obs	3.3650320	3.3650320	0
2	MRTIVIFO	MRTINF_obs	2.7125665	2.7125665	0
3	MRTIVIFO	MRTINF_obs	1.9164006	1.9164006	0
4	MRTIVIFO	MRTINF_obs	2.0578350	2.0578350	0
5	MRTIVIFO	MRTINF_obs	2.4985790	2.4985790	0
6	MRTIVIFO	MRTINF_obs	2.3543721	2.3543721	0
1	MRTIVIFP	MRTINF_pred	3.3724181	3.3724181	0
2	MRTIVIFP	MRTINF_pred	2.6693455	2.6693455	0
3	MRTIVIFP	MRTINF_pred	1.6916777	1.6916777	0
4	MRTIVIFP	MRTINF_pred	1.8166868	1.8166868	0
5	MRTIVIFP	MRTINF_pred	2.3481690	2.3481690	0
6	MRTIVIFP	MRTINF_pred	2.1198132	2.1198132	0
1	VSSO	Vss_obs	36.1720388	36.1720388	0
2	VSSO	Vss_obs	19.5568334	19.5568334	0
3	VSSO	Vss_obs	13.0758105	13.0758105	0
4	VSSO	Vss_obs	17.7272490	17.7272490	0
5	VSSO	Vss_obs	23.6988080	23.6988080	0
6	VSSO	Vss_obs	16.6015562	16.6015562	0
1	VSSP	Vss_pred	36.2269851	36.2269851	0
2	VSSP	Vss_pred	19.3419923	19.3419923	0
3	VSSP	Vss_pred	11.8493272	11.8493272	0
4	VSSP	Vss_pred	16.1136274	16.1136274	0
5	VSSP	Vss_pred	22.6263772	22.6263772	0
6	VSSP	Vss_pred	15.3613252	15.3613252	0

A.5 Test 5: Indometh (n=6), Linear, IV Infusion (0.25hr)

```
table_wres_rres(Wres5, Rres5,
                Caption = 'Indometh (n=6), Linear, IV Infusion (0.25hr)')
```

Table 6: Indometh (n=6), Linear, IV Infusion (0.25hr)

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
1	R2	Rsq	0.9970667	0.9970667	0

Table 6: Indometh (n=6), Linear, IV Infusion (0.25hr) *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
2	R2	Rsq	0.9476691	0.9476691	0
3	R2	Rsq	0.8758261	0.8758261	0
4	R2	Rsq	0.8671179	0.8671179	0
5	R2	Rsq	0.8752442	0.8752442	0
6	R2	Rsq	0.9039538	0.9039538	0
1	R2ADJ	Rsq_adjusted	0.9941335	0.9941335	0
2	R2ADJ	Rsq_adjusted	0.9401933	0.9401933	0
3	R2ADJ	Rsq_adjusted	0.8603043	0.8603043	0
4	R2ADJ	Rsq_adjusted	0.8505077	0.8505077	0
5	R2ADJ	Rsq_adjusted	0.8544516	0.8544516	0
6	R2ADJ	Rsq_adjusted	0.8902329	0.8902329	0
1	CORRXY	Corr_XY	-0.9985323	-0.9985323	0
2	CORRXY	Corr_XY	-0.9734830	-0.9734830	0
3	CORRXY	Corr_XY	-0.9358558	-0.9358558	0
4	CORRXY	Corr_XY	-0.9311917	-0.9311917	0
5	CORRXY	Corr_XY	-0.9355449	-0.9355449	0
6	CORRXY	Corr_XY	-0.9507649	-0.9507649	0
1	LAMZNPT	No_points_lambda_z	3.0000000	3.0000000	0
2	LAMZNPT	No_points_lambda_z	9.0000000	9.0000000	0
3	LAMZNPT	No_points_lambda_z	10.0000000	10.0000000	0
4	LAMZNPT	No_points_lambda_z	10.0000000	10.0000000	0
5	LAMZNPT	No_points_lambda_z	8.0000000	8.0000000	0
6	LAMZNPT	No_points_lambda_z	9.0000000	9.0000000	0
1	LAMZ	Lambda_z	0.1583205	0.1583205	0
2	LAMZ	Lambda_z	0.3022800	0.3022800	0
3	LAMZ	Lambda_z	0.4218926	0.4218926	0
4	LAMZ	Lambda_z	0.4290762	0.4290762	0
5	LAMZ	Lambda_z	0.2527478	0.2527478	0
6	LAMZ	Lambda_z	0.3535205	0.3535205	0
1	LAMZLL	Lambda_z_lower	5.0000000	5.0000000	0
2	LAMZLL	Lambda_z_lower	0.7500000	0.7500000	0
3	LAMZLL	Lambda_z_lower	0.5000000	0.5000000	0
4	LAMZLL	Lambda_z_lower	0.5000000	0.5000000	0
5	LAMZLL	Lambda_z_lower	1.0000000	1.0000000	0
6	LAMZLL	Lambda_z_lower	0.7500000	0.7500000	0
1	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
2	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
3	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
4	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
5	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
6	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
1	LAMZHL	HL_Lambda_z	4.3781270	4.3781270	0
2	LAMZHL	HL_Lambda_z	2.2930632	2.2930632	0
3	LAMZHL	HL_Lambda_z	1.6429468	1.6429468	0
4	LAMZHL	HL_Lambda_z	1.6154409	1.6154409	0

Table 6: Indometh (n=6), Linear, IV Infusion (0.25hr) *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
5	LAMZHL	HL_Lambda_z	2.7424461	2.7424461	0
6	LAMZHL	HL_Lambda_z	1.9606986	1.9606986	0
1	TMAX	Tmax	0.2500000	0.2500000	0
2	TMAX	Tmax	0.2500000	0.2500000	0
3	TMAX	Tmax	0.2500000	0.2500000	0
4	TMAX	Tmax	0.2500000	0.2500000	0
5	TMAX	Tmax	0.2500000	0.2500000	0
6	TMAX	Tmax	0.2500000	0.2500000	0
1	CMAX	Cmax	1.5000000	1.5000000	0
2	CMAX	Cmax	2.0300000	2.0300000	0
3	CMAX	Cmax	2.7200000	2.7200000	0
4	CMAX	Cmax	1.8500000	1.8500000	0
5	CMAX	Cmax	2.0500000	2.0500000	0
6	CMAX	Cmax	2.3100000	2.3100000	0
1	CMAXD	Cmax_D	0.0600000	0.0600000	0
2	CMAXD	Cmax_D	0.0812000	0.0812000	0
3	CMAXD	Cmax_D	0.1088000	0.1088000	0
4	CMAXD	Cmax_D	0.0740000	0.0740000	0
5	CMAXD	Cmax_D	0.0820000	0.0820000	0
6	CMAXD	Cmax_D	0.0924000	0.0924000	0
1	TLST	Tlast	8.0000000	8.0000000	0
2	TLST	Tlast	8.0000000	8.0000000	0
3	TLST	Tlast	8.0000000	8.0000000	0
4	TLST	Tlast	8.0000000	8.0000000	0
5	TLST	Tlast	8.0000000	8.0000000	0
6	TLST	Tlast	8.0000000	8.0000000	0
1	CLST	Clast	0.0500000	0.0500000	0
2	CLST	Clast	0.0800000	0.0800000	0
3	CLST	Clast	0.0800000	0.0800000	0
4	CLST	Clast	0.0700000	0.0700000	0
5	CLST	Clast	0.0600000	0.0600000	0
6	CLST	Clast	0.0900000	0.0900000	0
1	AUCLST	AUClast	1.7412500	1.7412500	0
2	AUCLST	AUClast	2.9325000	2.9325000	0
3	AUCLST	AUClast	2.9337500	2.9337500	0
4	AUCLST	AUClast	2.4775000	2.4775000	0
5	AUCLST	AUClast	1.9537500	1.9537500	0
6	AUCLST	AUClast	2.8725000	2.8725000	0
1	AUCALL	AUCall	1.7412500	1.7412500	0
2	AUCALL	AUCall	2.9325000	2.9325000	0
3	AUCALL	AUCall	2.9337500	2.9337500	0
4	AUCALL	AUCall	2.4775000	2.4775000	0
5	AUCALL	AUCall	1.9537500	1.9537500	0
6	AUCALL	AUCall	2.8725000	2.8725000	0
1	AUCIFO	AUCINF_obs	2.0570651	2.0570651	0

Table 6: Indometh (n=6), Linear, IV Infusion (0.25hr) *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
2	AUCIFO	AUCINF_obs	3.1971553	3.1971553	0
3	AUCIFO	AUCINF_obs	3.1233717	3.1233717	0
4	AUCIFO	AUCINF_obs	2.6406412	2.6406412	0
5	AUCIFO	AUCINF_obs	2.1911408	2.1911408	0
6	AUCIFO	AUCINF_obs	3.1270821	3.1270821	0
1	AUCIFOD	AUCINF_D_obs	0.0822826	0.0822826	0
2	AUCIFOD	AUCINF_D_obs	0.1278862	0.1278862	0
3	AUCIFOD	AUCINF_D_obs	0.1249349	0.1249349	0
4	AUCIFOD	AUCINF_D_obs	0.1056256	0.1056256	0
5	AUCIFOD	AUCINF_D_obs	0.0876456	0.0876456	0
6	AUCIFOD	AUCINF_D_obs	0.1250833	0.1250833	0
1	AUCPEO	AUC_.Extrap_obs	15.3527035	15.3527035	0
2	AUCPEO	AUC_.Extrap_obs	8.2778360	8.2778360	0
3	AUCPEO	AUC_.Extrap_obs	6.0710577	6.0710577	0
4	AUCPEO	AUC_.Extrap_obs	6.1780905	6.1780905	0
5	AUCPEO	AUC_.Extrap_obs	10.8341191	10.8341191	0
6	AUCPEO	AUC_.Extrap_obs	8.1412032	8.1412032	0
1	VZO	Vz_obs	76.7635175	76.7635175	0
2	VZO	Vz_obs	25.8682374	25.8682374	0
3	VZO	Vz_obs	18.9720552	18.9720552	0
4	VZO	Vz_obs	22.0646091	22.0646091	0
5	VZO	Vz_obs	45.1421631	45.1421631	0
6	VZO	Vz_obs	22.6144534	22.6144534	0
1	CLO	Cl_obs	12.1532371	12.1532371	0
2	CLO	Cl_obs	7.8194513	7.8194513	0
3	CLO	Cl_obs	8.0041706	8.0041706	0
4	CLO	Cl_obs	9.4673975	9.4673975	0
5	CLO	Cl_obs	11.4095817	11.4095817	0
6	CLO	Cl_obs	7.9946733	7.9946733	0
1	AUCIFP	AUCINF_pred	2.0586347	2.0586347	0
2	AUCIFP	AUCINF_pred	3.1798068	3.1798068	0
3	AUCIFP	AUCINF_pred	3.0284958	3.0284958	0
4	AUCIFP	AUCINF_pred	2.5577884	2.5577884	0
5	AUCIFP	AUCINF_pred	2.1498803	2.1498803	0
6	AUCIFP	AUCINF_pred	3.0315925	3.0315925	0
1	AUCIFPD	AUCINF_D_pred	0.0823454	0.0823454	0
2	AUCIFPD	AUCINF_D_pred	0.1271923	0.1271923	0
3	AUCIFPD	AUCINF_D_pred	0.1211398	0.1211398	0
4	AUCIFPD	AUCINF_D_pred	0.1023115	0.1023115	0
5	AUCIFPD	AUCINF_D_pred	0.0859952	0.0859952	0
6	AUCIFPD	AUCINF_D_pred	0.1212637	0.1212637	0
1	AUCPEP	AUC_.Extrap_pred	15.4172443	15.4172443	0
2	AUCPEP	AUC_.Extrap_pred	7.7774164	7.7774164	0
3	AUCPEP	AUC_.Extrap_pred	3.1284787	3.1284787	0
4	AUCPEP	AUC_.Extrap_pred	3.1389787	3.1389787	0

Table 6: Indometh (n=6), Linear, IV Infusion (0.25hr) *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
5	AUCPEP	AUC_.Extrap_pred	9.1228460	9.1228460	0
6	AUCPEP	AUC_.Extrap_pred	5.2478198	5.2478198	0
1	VZP	Vz_pred	76.7049878	76.7049878	0
2	VZP	Vz_pred	26.0093699	26.0093699	0
3	VZP	Vz_pred	19.5664063	19.5664063	0
4	VZP	Vz_pred	22.7793336	22.7793336	0
5	VZP	Vz_pred	46.0085322	46.0085322	0
6	VZP	Vz_pred	23.3267671	23.3267671	0
1	CLP	Cl_pred	12.1439707	12.1439707	0
2	CLP	Cl_pred	7.8621128	7.8621128	0
3	CLP	Cl_pred	8.2549230	8.2549230	0
4	CLP	Cl_pred	9.7740688	9.7740688	0
5	CLP	Cl_pred	11.6285546	11.6285546	0
6	CLP	Cl_pred	8.2464909	8.2464909	0
1	AUMCLST	AUMClast	3.2712500	3.2712500	0
2	AUMCLST	AUMClast	6.3987500	6.3987500	0
3	AUMCLST	AUMClast	5.0062500	5.0062500	0
4	AUMCLST	AUMClast	4.3818750	4.3818750	0
5	AUMCLST	AUMClast	3.7075000	3.7075000	0
6	AUMCLST	AUMClast	5.5325000	5.5325000	0
1	AUMCIFO	AUMCINF_obs	7.7925545	7.7925545	0
2	AUMCIFO	AUMCINF_obs	9.3915223	9.3915223	0
3	AUMCIFO	AUMCINF_obs	6.9726784	6.9726784	0
4	AUMCIFO	AUMCINF_obs	6.0672197	6.0672197	0
5	AUMCIFO	AUMCINF_obs	6.5458663	6.5458663	0
6	AUMCIFO	AUMCINF_obs	8.2892908	8.2892908	0
1	AUMCPEO	AUMC_.Extrap_obs	58.0208261	58.0208261	0
2	AUMCPEO	AUMC_.Extrap_obs	31.8667432	31.8667432	0
3	AUMCPEO	AUMC_.Extrap_obs	28.2019090	28.2019090	0
4	AUMCPEO	AUMC_.Extrap_obs	27.7778746	27.7778746	0
5	AUMCPEO	AUMC_.Extrap_obs	43.3612023	43.3612023	0
6	AUMCPEO	AUMC_.Extrap_obs	33.2572574	33.2572574	0
1	AUMCIFP	AUMCINF_pred	7.8150259	7.8150259	0
2	AUMCIFP	AUMCINF_pred	9.1953427	9.1953427	0
3	AUMCIFP	AUMCINF_pred	5.9887901	5.9887901	0
4	AUMCIFP	AUMCINF_pred	5.2113018	5.2113018	0
5	AUMCIFP	AUMCINF_pred	6.0525342	6.0525342	0
6	AUMCIFP	AUMCINF_pred	7.2552635	7.2552635	0
1	AUMCPEP	AUMC_.Extrap_pred	58.1415337	58.1415337	0
2	AUMCPEP	AUMC_.Extrap_pred	30.4131425	30.4131425	0
3	AUMCPEP	AUMC_.Extrap_pred	16.4063210	16.4063210	0
4	AUMCPEP	AUMC_.Extrap_pred	15.9159231	15.9159231	0
5	AUMCPEP	AUMC_.Extrap_pred	38.7446663	38.7446663	0
6	AUMCPEP	AUMC_.Extrap_pred	23.7450164	23.7450164	0
1	MRTIVLST	MRTlast	1.7536791	1.7536791	0

Table 6: Indometh (n=6), Linear, IV Infusion (0.25hr) *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
2	MRTIVLST	MRTlast	2.0570119	2.0570119	0
3	MRTIVLST	MRTlast	1.5814337	1.5814337	0
4	MRTIVLST	MRTlast	1.6436680	1.6436680	0
5	MRTIVLST	MRTlast	1.7726328	1.7726328	0
6	MRTIVLST	MRTlast	1.8010226	1.8010226	0
1	MRTIVIFO	MRTINF_obs	3.6631905	3.6631905	0
2	MRTIVIFO	MRTINF_obs	2.8124621	2.8124621	0
3	MRTIVIFO	MRTINF_obs	2.1074203	2.1074203	0
4	MRTIVIFO	MRTINF_obs	2.1726312	2.1726312	0
5	MRTIVIFO	MRTINF_obs	2.8624239	2.8624239	0
6	MRTIVIFO	MRTINF_obs	2.5258069	2.5258069	0
1	MRTIVIFP	MRTINF_pred	3.6712178	3.6712178	0
2	MRTIVIFP	MRTINF_pred	2.7667929	2.7667929	0
3	MRTIVIFP	MRTINF_pred	1.8524801	1.8524801	0
4	MRTIVIFP	MRTINF_pred	1.9124249	1.9124249	0
5	MRTIVIFP	MRTINF_pred	2.6902890	2.6902890	0
6	MRTIVIFP	MRTINF_pred	2.2682186	2.2682186	0
1	VSSO	Vss_obs	44.5196227	44.5196227	0
2	VSSO	Vss_obs	21.9919102	21.9919102	0
3	VSSO	Vss_obs	16.8681518	16.8681518	0
4	VSSO	Vss_obs	20.5691634	20.5691634	0
5	VSSO	Vss_obs	32.6590590	32.6590590	0
6	VSSO	Vss_obs	20.1930009	20.1930009	0
1	VSSP	Vss_pred	44.5831617	44.5831617	0
2	VSSP	Vss_pred	21.7528377	21.7528377	0
3	VSSP	Vss_pred	15.2920802	15.2920802	0
4	VSSP	Vss_pred	18.6921722	18.6921722	0
5	VSSP	Vss_pred	31.2841719	31.2841719	0
6	VSSP	Vss_pred	18.7048438	18.7048438	0

A.6 Test 6: Indometh (n=6), Log, IV Infusion (0.25hr)

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table_wres_rres(Wres6, Rres6,
                Caption = 'Indometh (n=6), Log, IV Infusion (0.25hr)')
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Table 7: Indometh (n=6), Log, IV Infusion (0.25hr)

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
1	R2	Rsq	0.9970667	0.9970667	0
2	R2	Rsq	0.9476691	0.9476691	0
3	R2	Rsq	0.8758261	0.8758261	0
4	R2	Rsq	0.8671179	0.8671179	0
5	R2	Rsq	0.8752442	0.8752442	0

Table 7: Indometh (n=6), Log, IV Infusion (0.25hr) *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
6	R2	Rsq	0.9039538	0.9039538	0
1	R2ADJ	Rsq_adjusted	0.9941335	0.9941335	0
2	R2ADJ	Rsq_adjusted	0.9401933	0.9401933	0
3	R2ADJ	Rsq_adjusted	0.8603043	0.8603043	0
4	R2ADJ	Rsq_adjusted	0.8505077	0.8505077	0
5	R2ADJ	Rsq_adjusted	0.8544516	0.8544516	0
6	R2ADJ	Rsq_adjusted	0.8902329	0.8902329	0
1	CORRXY	Corr_XY	-0.9985323	-0.9985323	0
2	CORRXY	Corr_XY	-0.9734830	-0.9734830	0
3	CORRXY	Corr_XY	-0.9358558	-0.9358558	0
4	CORRXY	Corr_XY	-0.9311917	-0.9311917	0
5	CORRXY	Corr_XY	-0.9355449	-0.9355449	0
6	CORRXY	Corr_XY	-0.9507649	-0.9507649	0
1	LAMZNPT	No_points_lambda_z	3.0000000	3.0000000	0
2	LAMZNPT	No_points_lambda_z	9.0000000	9.0000000	0
3	LAMZNPT	No_points_lambda_z	10.0000000	10.0000000	0
4	LAMZNPT	No_points_lambda_z	10.0000000	10.0000000	0
5	LAMZNPT	No_points_lambda_z	8.0000000	8.0000000	0
6	LAMZNPT	No_points_lambda_z	9.0000000	9.0000000	0
1	LAMZ	Lambda_z	0.1583205	0.1583205	0
2	LAMZ	Lambda_z	0.3022800	0.3022800	0
3	LAMZ	Lambda_z	0.4218926	0.4218926	0
4	LAMZ	Lambda_z	0.4290762	0.4290762	0
5	LAMZ	Lambda_z	0.2527478	0.2527478	0
6	LAMZ	Lambda_z	0.3535205	0.3535205	0
1	LAMZLL	Lambda_z_lower	5.0000000	5.0000000	0
2	LAMZLL	Lambda_z_lower	0.7500000	0.7500000	0
3	LAMZLL	Lambda_z_lower	0.5000000	0.5000000	0
4	LAMZLL	Lambda_z_lower	0.5000000	0.5000000	0
5	LAMZLL	Lambda_z_lower	1.0000000	1.0000000	0
6	LAMZLL	Lambda_z_lower	0.7500000	0.7500000	0
1	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
2	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
3	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
4	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
5	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
6	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
1	LAMZHL	HL_Lambda_z	4.3781270	4.3781270	0
2	LAMZHL	HL_Lambda_z	2.2930632	2.2930632	0
3	LAMZHL	HL_Lambda_z	1.6429468	1.6429468	0
4	LAMZHL	HL_Lambda_z	1.6154409	1.6154409	0
5	LAMZHL	HL_Lambda_z	2.7424461	2.7424461	0
6	LAMZHL	HL_Lambda_z	1.9606986	1.9606986	0
1	TMAX	Tmax	0.2500000	0.2500000	0
2	TMAX	Tmax	0.2500000	0.2500000	0

Table 7: Indometh (n=6), Log, IV Infusion (0.25hr) *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
3	TMAX	Tmax	0.2500000	0.2500000	0
4	TMAX	Tmax	0.2500000	0.2500000	0
5	TMAX	Tmax	0.2500000	0.2500000	0
6	TMAX	Tmax	0.2500000	0.2500000	0
1	CMAX	Cmax	1.5000000	1.5000000	0
2	CMAX	Cmax	2.0300000	2.0300000	0
3	CMAX	Cmax	2.7200000	2.7200000	0
4	CMAX	Cmax	1.8500000	1.8500000	0
5	CMAX	Cmax	2.0500000	2.0500000	0
6	CMAX	Cmax	2.3100000	2.3100000	0
1	CMAXD	Cmax_D	0.0600000	0.0600000	0
2	CMAXD	Cmax_D	0.0812000	0.0812000	0
3	CMAXD	Cmax_D	0.1088000	0.1088000	0
4	CMAXD	Cmax_D	0.0740000	0.0740000	0
5	CMAXD	Cmax_D	0.0820000	0.0820000	0
6	CMAXD	Cmax_D	0.0924000	0.0924000	0
1	TLST	Tlast	8.0000000	8.0000000	0
2	TLST	Tlast	8.0000000	8.0000000	0
3	TLST	Tlast	8.0000000	8.0000000	0
4	TLST	Tlast	8.0000000	8.0000000	0
5	TLST	Tlast	8.0000000	8.0000000	0
6	TLST	Tlast	8.0000000	8.0000000	0
1	CLST	Clast	0.0500000	0.0500000	0
2	CLST	Clast	0.0800000	0.0800000	0
3	CLST	Clast	0.0800000	0.0800000	0
4	CLST	Clast	0.0700000	0.0700000	0
5	CLST	Clast	0.0600000	0.0600000	0
6	CLST	Clast	0.0900000	0.0900000	0
1	AUCLST	AUClast	1.7193653	1.7193653	0
2	AUCLST	AUClast	2.8891436	2.8891436	0
3	AUCLST	AUClast	2.8817113	2.8817113	0
4	AUCLST	AUClast	2.4442459	2.4442459	0
5	AUCLST	AUClast	1.9211984	1.9211984	0
6	AUCLST	AUClast	2.8413138	2.8413138	0
1	AUCALL	AUCall	1.7193653	1.7193653	0
2	AUCALL	AUCall	2.8891436	2.8891436	0
3	AUCALL	AUCall	2.8817113	2.8817113	0
4	AUCALL	AUCall	2.4442459	2.4442459	0
5	AUCALL	AUCall	1.9211984	1.9211984	0
6	AUCALL	AUCall	2.8413138	2.8413138	0
1	AUCIFO	AUCINF_obs	2.0351804	2.0351804	0
2	AUCIFO	AUCINF_obs	3.1537989	3.1537989	0
3	AUCIFO	AUCINF_obs	3.0713330	3.0713330	0
4	AUCIFO	AUCINF_obs	2.6073871	2.6073871	0
5	AUCIFO	AUCINF_obs	2.1585892	2.1585892	0

Table 7: Indometh (n=6), Log, IV Infusion (0.25hr) *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
6	AUCIFO	AUCINF_obs	3.0958959	3.0958959	0
1	AUCIFOD	AUCINF_D_obs	0.0814072	0.0814072	0
2	AUCIFOD	AUCINF_D_obs	0.1261520	0.1261520	0
3	AUCIFOD	AUCINF_D_obs	0.1228533	0.1228533	0
4	AUCIFOD	AUCINF_D_obs	0.1042955	0.1042955	0
5	AUCIFOD	AUCINF_D_obs	0.0863436	0.0863436	0
6	AUCIFOD	AUCINF_D_obs	0.1238358	0.1238358	0
1	AUCPEO	AUC_.Extrap_obs	15.5177942	15.5177942	0
2	AUCPEO	AUC_.Extrap_obs	8.3916343	8.3916343	0
3	AUCPEO	AUC_.Extrap_obs	6.1739217	6.1739217	0
4	AUCPEO	AUC_.Extrap_obs	6.2568848	6.2568848	0
5	AUCPEO	AUC_.Extrap_obs	10.9974979	10.9974979	0
6	AUCPEO	AUC_.Extrap_obs	8.2232127	8.2232127	0
1	VZO	Vz_obs	77.5889712	77.5889712	0
2	VZO	Vz_obs	26.2238573	26.2238573	0
3	VZO	Vz_obs	19.2935053	19.2935053	0
4	VZO	Vz_obs	22.3460171	22.3460171	0
5	VZO	Vz_obs	45.8229078	45.8229078	0
6	VZO	Vz_obs	22.8422576	22.8422576	0
1	CLO	Cl_obs	12.2839234	12.2839234	0
2	CLO	Cl_obs	7.9269481	7.9269481	0
3	CLO	Cl_obs	8.1397881	8.1397881	0
4	CLO	Cl_obs	9.5881430	9.5881430	0
5	CLO	Cl_obs	11.5816384	11.5816384	0
6	CLO	Cl_obs	8.0752068	8.0752068	0
1	AUCIFP	AUCINF_pred	2.0367500	2.0367500	0
2	AUCIFP	AUCINF_pred	3.1364504	3.1364504	0
3	AUCIFP	AUCINF_pred	2.9764572	2.9764572	0
4	AUCIFP	AUCINF_pred	2.5245343	2.5245343	0
5	AUCIFP	AUCINF_pred	2.1173287	2.1173287	0
6	AUCIFP	AUCINF_pred	3.0004063	3.0004063	0
1	AUCIFPD	AUCINF_D_pred	0.0814700	0.0814700	0
2	AUCIFPD	AUCINF_D_pred	0.1254580	0.1254580	0
3	AUCIFPD	AUCINF_D_pred	0.1190583	0.1190583	0
4	AUCIFPD	AUCINF_D_pred	0.1009814	0.1009814	0
5	AUCIFPD	AUCINF_D_pred	0.0846931	0.0846931	0
6	AUCIFPD	AUCINF_D_pred	0.1200163	0.1200163	0
1	AUCPEP	AUC_.Extrap_pred	15.5829013	15.5829013	0
2	AUCPEP	AUC_.Extrap_pred	7.8849267	7.8849267	0
3	AUCPEP	AUC_.Extrap_pred	3.1831752	3.1831752	0
4	AUCPEP	AUC_.Extrap_pred	3.1803265	3.1803265	0
5	AUCPEP	AUC_.Extrap_pred	9.2630996	9.2630996	0
6	AUCPEP	AUC_.Extrap_pred	5.3023656	5.3023656	0
1	VZP	Vz_pred	77.5291765	77.5291765	0
2	VZP	Vz_pred	26.3689077	26.3689077	0

Table 7: Indometh (n=6), Log, IV Infusion (0.25hr) *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
3	VZP	Vz_pred	19.9084941	19.9084941	0
4	VZP	Vz_pred	23.0793917	23.0793917	0
5	VZP	Vz_pred	46.7158621	46.7158621	0
6	VZP	Vz_pred	23.5692251	23.5692251	0
1	CLP	Cl_pred	12.2744566	12.2744566	0
2	CLP	Cl_pred	7.9707940	7.9707940	0
3	CLP	Cl_pred	8.3992473	8.3992473	0
4	CLP	Cl_pred	9.9028165	9.9028165	0
5	CLP	Cl_pred	11.8073306	11.8073306	0
6	CLP	Cl_pred	8.3322048	8.3322048	0
1	AUMCLST	AUMClast	3.2965543	3.2965543	0
2	AUMCLST	AUMClast	6.4082620	6.4082620	0
3	AUMCLST	AUMClast	5.0353383	5.0353383	0
4	AUMCLST	AUMClast	4.3990453	4.3990453	0
5	AUMCLST	AUMClast	3.7299741	3.7299741	0
6	AUMCLST	AUMClast	5.5775672	5.5775672	0
1	AUMCIFO	AUMCINF_obs	7.8178588	7.8178588	0
2	AUMCIFO	AUMCINF_obs	9.4010343	9.4010343	0
3	AUMCIFO	AUMCINF_obs	7.0017667	7.0017667	0
4	AUMCIFO	AUMCINF_obs	6.0843899	6.0843899	0
5	AUMCIFO	AUMCINF_obs	6.5683405	6.5683405	0
6	AUMCIFO	AUMCINF_obs	8.3343579	8.3343579	0
1	AUMCPEO	AUMC_.Extrap_obs	57.8330281	57.8330281	0
2	AUMCPEO	AUMC_.Extrap_obs	31.8345005	31.8345005	0
3	AUMCPEO	AUMC_.Extrap_obs	28.0847466	28.0847466	0
4	AUMCPEO	AUMC_.Extrap_obs	27.6994849	27.6994849	0
5	AUMCPEO	AUMC_.Extrap_obs	43.2128382	43.2128382	0
6	AUMCPEO	AUMC_.Extrap_obs	33.0774222	33.0774222	0
1	AUMCIFP	AUMCINF_pred	7.8403303	7.8403303	0
2	AUMCIFP	AUMCINF_pred	9.2048546	9.2048546	0
3	AUMCIFP	AUMCINF_pred	6.0178784	6.0178784	0
4	AUMCIFP	AUMCINF_pred	5.2284721	5.2284721	0
5	AUMCIFP	AUMCINF_pred	6.0750083	6.0750083	0
6	AUMCIFP	AUMCINF_pred	7.3003307	7.3003307	0
1	AUMCPEP	AUMC_.Extrap_pred	57.9538845	57.9538845	0
2	AUMCPEP	AUMC_.Extrap_pred	30.3817147	30.3817147	0
3	AUMCPEP	AUMC_.Extrap_pred	16.3270188	16.3270188	0
4	AUMCPEP	AUMC_.Extrap_pred	15.8636553	15.8636553	0
5	AUMCPEP	AUMC_.Extrap_pred	38.6013327	38.6013327	0
6	AUMCPEP	AUMC_.Extrap_pred	23.5984312	23.5984312	0
1	MRTIVLST	MRTlast	1.7923089	1.7923089	0
2	MRTIVLST	MRTlast	2.0930490	2.0930490	0
3	MRTIVLST	MRTlast	1.6223430	1.6223430	0
4	MRTIVLST	MRTlast	1.6747556	1.6747556	0
5	MRTIVLST	MRTlast	1.8164830	1.8164830	0

Table 7: Indometh (n=6), Log, IV Infusion (0.25hr) *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
6	MRTIVLST	MRTlast	1.8380240	1.8380240	0
1	MRTIVIFO	MRTINF_obs	3.7163591	3.7163591	0
2	MRTIVIFO	MRTINF_obs	2.8558604	2.8558604	0
3	MRTIVIFO	MRTINF_obs	2.1547159	2.1547159	0
4	MRTIVIFO	MRTINF_obs	2.2085200	2.2085200	0
5	MRTIVIFO	MRTINF_obs	2.9178858	2.9178858	0
6	MRTIVIFO	MRTINF_obs	2.5670666	2.5670666	0
1	MRTIVIFP	MRTINF_pred	3.7244318	3.7244318	0
2	MRTIVIFP	MRTINF_pred	2.8098000	2.8098000	0
3	MRTIVIFP	MRTINF_pred	1.8968260	1.8968260	0
4	MRTIVIFP	MRTINF_pred	1.9460640	1.9460640	0
5	MRTIVIFP	MRTINF_pred	2.7441853	2.7441853	0
6	MRTIVIFP	MRTINF_pred	2.3081140	2.3081140	0
1	VSSO	Vss_obs	45.6514707	45.6514707	0
2	VSSO	Vss_obs	22.6382575	22.6382575	0
3	VSSO	Vss_obs	17.5389306	17.5389306	0
4	VSSO	Vss_obs	21.1756058	21.1756058	0
5	VSSO	Vss_obs	33.7938980	33.7938980	0
6	VSSO	Vss_obs	20.7295934	20.7295934	0
1	VSSP	Vss_pred	45.7153760	45.7153760	0
2	VSSP	Vss_pred	22.3963368	22.3963368	0
3	VSSP	Vss_pred	15.9319103	15.9319103	0
4	VSSP	Vss_pred	19.2715146	19.2715146	0
5	VSSP	Vss_pred	32.4015028	32.4015028	0
6	VSSP	Vss_pred	19.2316785	19.2316785	0

A.7 Test 7: Indometh (n=6), Linear, Extravascular

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table_wres_rres(Wres7, Rres7,
                Caption = 'Indometh (n=6), Linear, Extravascular')
```

Table 8: Indometh (n=6), Linear, Extravascular

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
1	R2	Rsq	0.9970667	0.9970667	0
2	R2	Rsq	0.9476691	0.9476691	0
3	R2	Rsq	0.8758261	0.8758261	0
4	R2	Rsq	0.8671179	0.8671179	0
5	R2	Rsq	0.8752442	0.8752442	0
6	R2	Rsq	0.9039538	0.9039538	0
1	R2ADJ	Rsq_adjusted	0.9941335	0.9941335	0
2	R2ADJ	Rsq_adjusted	0.9401933	0.9401933	0

Table 8: Indometh (n=6), Linear, Extravascular *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
3	R2ADJ	Rsq_adjusted	0.8603043	0.8603043	0
4	R2ADJ	Rsq_adjusted	0.8505077	0.8505077	0
5	R2ADJ	Rsq_adjusted	0.8544516	0.8544516	0
6	R2ADJ	Rsq_adjusted	0.8902329	0.8902329	0
1	CORRXY	Corr_XY	-0.9985323	-0.9985323	0
2	CORRXY	Corr_XY	-0.9734830	-0.9734830	0
3	CORRXY	Corr_XY	-0.9358558	-0.9358558	0
4	CORRXY	Corr_XY	-0.9311917	-0.9311917	0
5	CORRXY	Corr_XY	-0.9355449	-0.9355449	0
6	CORRXY	Corr_XY	-0.9507649	-0.9507649	0
1	LAMZNPT	No_points_lambda_z	3.0000000	3.0000000	0
2	LAMZNPT	No_points_lambda_z	9.0000000	9.0000000	0
3	LAMZNPT	No_points_lambda_z	10.0000000	10.0000000	0
4	LAMZNPT	No_points_lambda_z	10.0000000	10.0000000	0
5	LAMZNPT	No_points_lambda_z	8.0000000	8.0000000	0
6	LAMZNPT	No_points_lambda_z	9.0000000	9.0000000	0
1	LAMZ	Lambda_z	0.1583205	0.1583205	0
2	LAMZ	Lambda_z	0.3022800	0.3022800	0
3	LAMZ	Lambda_z	0.4218926	0.4218926	0
4	LAMZ	Lambda_z	0.4290762	0.4290762	0
5	LAMZ	Lambda_z	0.2527478	0.2527478	0
6	LAMZ	Lambda_z	0.3535205	0.3535205	0
1	LAMZLL	Lambda_z_lower	5.0000000	5.0000000	0
2	LAMZLL	Lambda_z_lower	0.7500000	0.7500000	0
3	LAMZLL	Lambda_z_lower	0.5000000	0.5000000	0
4	LAMZLL	Lambda_z_lower	0.5000000	0.5000000	0
5	LAMZLL	Lambda_z_lower	1.0000000	1.0000000	0
6	LAMZLL	Lambda_z_lower	0.7500000	0.7500000	0
1	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
2	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
3	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
4	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
5	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
6	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
1	LAMZHL	HL_Lambda_z	4.3781270	4.3781270	0
2	LAMZHL	HL_Lambda_z	2.2930632	2.2930632	0
3	LAMZHL	HL_Lambda_z	1.6429468	1.6429468	0
4	LAMZHL	HL_Lambda_z	1.6154409	1.6154409	0
5	LAMZHL	HL_Lambda_z	2.7424461	2.7424461	0
6	LAMZHL	HL_Lambda_z	1.9606986	1.9606986	0
1	TLAG	Tlag	0.0000000	0.0000000	0
2	TLAG	Tlag	0.0000000	0.0000000	0
3	TLAG	Tlag	0.0000000	0.0000000	0
4	TLAG	Tlag	0.0000000	0.0000000	0
5	TLAG	Tlag	0.0000000	0.0000000	0

Table 8: Indometh (n=6), Linear, Extravascular *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
6	TLAG	Tlag	0.0000000	0.0000000	0
1	TMAX	Tmax	0.2500000	0.2500000	0
2	TMAX	Tmax	0.2500000	0.2500000	0
3	TMAX	Tmax	0.2500000	0.2500000	0
4	TMAX	Tmax	0.2500000	0.2500000	0
5	TMAX	Tmax	0.2500000	0.2500000	0
6	TMAX	Tmax	0.2500000	0.2500000	0
1	CMAX	Cmax	1.5000000	1.5000000	0
2	CMAX	Cmax	2.0300000	2.0300000	0
3	CMAX	Cmax	2.7200000	2.7200000	0
4	CMAX	Cmax	1.8500000	1.8500000	0
5	CMAX	Cmax	2.0500000	2.0500000	0
6	CMAX	Cmax	2.3100000	2.3100000	0
1	CMAXD	Cmax_D	0.0600000	0.0600000	0
2	CMAXD	Cmax_D	0.0812000	0.0812000	0
3	CMAXD	Cmax_D	0.1088000	0.1088000	0
4	CMAXD	Cmax_D	0.0740000	0.0740000	0
5	CMAXD	Cmax_D	0.0820000	0.0820000	0
6	CMAXD	Cmax_D	0.0924000	0.0924000	0
1	TLST	Tlast	8.0000000	8.0000000	0
2	TLST	Tlast	8.0000000	8.0000000	0
3	TLST	Tlast	8.0000000	8.0000000	0
4	TLST	Tlast	8.0000000	8.0000000	0
5	TLST	Tlast	8.0000000	8.0000000	0
6	TLST	Tlast	8.0000000	8.0000000	0
1	CLST	Clast	0.0500000	0.0500000	0
2	CLST	Clast	0.0800000	0.0800000	0
3	CLST	Clast	0.0800000	0.0800000	0
4	CLST	Clast	0.0700000	0.0700000	0
5	CLST	Clast	0.0600000	0.0600000	0
6	CLST	Clast	0.0900000	0.0900000	0
1	AUCLST	AUClast	1.7412500	1.7412500	0
2	AUCLST	AUClast	2.9325000	2.9325000	0
3	AUCLST	AUClast	2.9337500	2.9337500	0
4	AUCLST	AUClast	2.4775000	2.4775000	0
5	AUCLST	AUClast	1.9537500	1.9537500	0
6	AUCLST	AUClast	2.8725000	2.8725000	0
1	AUCALL	AUCall	1.7412500	1.7412500	0
2	AUCALL	AUCall	2.9325000	2.9325000	0
3	AUCALL	AUCall	2.9337500	2.9337500	0
4	AUCALL	AUCall	2.4775000	2.4775000	0
5	AUCALL	AUCall	1.9537500	1.9537500	0
6	AUCALL	AUCall	2.8725000	2.8725000	0
1	AUCIFO	AUCINF_obs	2.0570651	2.0570651	0
2	AUCIFO	AUCINF_obs	3.1971553	3.1971553	0

Table 8: Indometh (n=6), Linear, Extravascular *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
3	AUCIFO	AUCINF_obs	3.1233717	3.1233717	0
4	AUCIFO	AUCINF_obs	2.6406412	2.6406412	0
5	AUCIFO	AUCINF_obs	2.1911408	2.1911408	0
6	AUCIFO	AUCINF_obs	3.1270821	3.1270821	0
1	AUCIFOD	AUCINF_D_obs	0.0822826	0.0822826	0
2	AUCIFOD	AUCINF_D_obs	0.1278862	0.1278862	0
3	AUCIFOD	AUCINF_D_obs	0.1249349	0.1249349	0
4	AUCIFOD	AUCINF_D_obs	0.1056256	0.1056256	0
5	AUCIFOD	AUCINF_D_obs	0.0876456	0.0876456	0
6	AUCIFOD	AUCINF_D_obs	0.1250833	0.1250833	0
1	AUCPEO	AUC_.Extrap_obs	15.3527035	15.3527035	0
2	AUCPEO	AUC_.Extrap_obs	8.2778360	8.2778360	0
3	AUCPEO	AUC_.Extrap_obs	6.0710577	6.0710577	0
4	AUCPEO	AUC_.Extrap_obs	6.1780905	6.1780905	0
5	AUCPEO	AUC_.Extrap_obs	10.8341191	10.8341191	0
6	AUCPEO	AUC_.Extrap_obs	8.1412032	8.1412032	0
1	VZFO	Vz_F_obs	76.7635175	76.7635175	0
2	VZFO	Vz_F_obs	25.8682374	25.8682374	0
3	VZFO	Vz_F_obs	18.9720552	18.9720552	0
4	VZFO	Vz_F_obs	22.0646091	22.0646091	0
5	VZFO	Vz_F_obs	45.1421631	45.1421631	0
6	VZFO	Vz_F_obs	22.6144534	22.6144534	0
1	CLFO	Cl_F_obs	12.1532371	12.1532371	0
2	CLFO	Cl_F_obs	7.8194513	7.8194513	0
3	CLFO	Cl_F_obs	8.0041706	8.0041706	0
4	CLFO	Cl_F_obs	9.4673975	9.4673975	0
5	CLFO	Cl_F_obs	11.4095817	11.4095817	0
6	CLFO	Cl_F_obs	7.9946733	7.9946733	0
1	AUCIFP	AUCINF_pred	2.0586347	2.0586347	0
2	AUCIFP	AUCINF_pred	3.1798068	3.1798068	0
3	AUCIFP	AUCINF_pred	3.0284958	3.0284958	0
4	AUCIFP	AUCINF_pred	2.5577884	2.5577884	0
5	AUCIFP	AUCINF_pred	2.1498803	2.1498803	0
6	AUCIFP	AUCINF_pred	3.0315925	3.0315925	0
1	AUCIFPD	AUCINF_D_pred	0.0823454	0.0823454	0
2	AUCIFPD	AUCINF_D_pred	0.1271923	0.1271923	0
3	AUCIFPD	AUCINF_D_pred	0.1211398	0.1211398	0
4	AUCIFPD	AUCINF_D_pred	0.1023115	0.1023115	0
5	AUCIFPD	AUCINF_D_pred	0.0859952	0.0859952	0
6	AUCIFPD	AUCINF_D_pred	0.1212637	0.1212637	0
1	AUCPEP	AUC_.Extrap_pred	15.4172443	15.4172443	0
2	AUCPEP	AUC_.Extrap_pred	7.7774164	7.7774164	0
3	AUCPEP	AUC_.Extrap_pred	3.1284787	3.1284787	0
4	AUCPEP	AUC_.Extrap_pred	3.1389787	3.1389787	0
5	AUCPEP	AUC_.Extrap_pred	9.1228460	9.1228460	0

Table 8: Indometh (n=6), Linear, Extravascular *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
6	AUCPEP	AUC_.Extrap_pred	5.2478198	5.2478198	0
1	VZFP	Vz_F_pred	76.7049878	76.7049878	0
2	VZFP	Vz_F_pred	26.0093699	26.0093699	0
3	VZFP	Vz_F_pred	19.5664063	19.5664063	0
4	VZFP	Vz_F_pred	22.7793336	22.7793336	0
5	VZFP	Vz_F_pred	46.0085322	46.0085322	0
6	VZFP	Vz_F_pred	23.3267671	23.3267671	0
1	CLFP	Cl_F_pred	12.1439707	12.1439707	0
2	CLFP	Cl_F_pred	7.8621128	7.8621128	0
3	CLFP	Cl_F_pred	8.2549230	8.2549230	0
4	CLFP	Cl_F_pred	9.7740688	9.7740687	0
5	CLFP	Cl_F_pred	11.6285546	11.6285546	0
6	CLFP	Cl_F_pred	8.2464909	8.2464909	0
1	AUMCLST	AUMClast	3.2712500	3.2712500	0
2	AUMCLST	AUMClast	6.3987500	6.3987500	0
3	AUMCLST	AUMClast	5.0062500	5.0062500	0
4	AUMCLST	AUMClast	4.3818750	4.3818750	0
5	AUMCLST	AUMClast	3.7075000	3.7075000	0
6	AUMCLST	AUMClast	5.5325000	5.5325000	0
1	AUMCIFO	AUMCINF_obs	7.7925545	7.7925545	0
2	AUMCIFO	AUMCINF_obs	9.3915223	9.3915223	0
3	AUMCIFO	AUMCINF_obs	6.9726784	6.9726784	0
4	AUMCIFO	AUMCINF_obs	6.0672197	6.0672197	0
5	AUMCIFO	AUMCINF_obs	6.5458663	6.5458663	0
6	AUMCIFO	AUMCINF_obs	8.2892908	8.2892908	0
1	AUMCPEO	AUMC_.Extrap_obs	58.0208261	58.0208261	0
2	AUMCPEO	AUMC_.Extrap_obs	31.8667432	31.8667432	0
3	AUMCPEO	AUMC_.Extrap_obs	28.2019090	28.2019090	0
4	AUMCPEO	AUMC_.Extrap_obs	27.7778746	27.7778746	0
5	AUMCPEO	AUMC_.Extrap_obs	43.3612023	43.3612023	0
6	AUMCPEO	AUMC_.Extrap_obs	33.2572574	33.2572574	0
1	AUMCIFP	AUMCINF_pred	7.8150259	7.8150259	0
2	AUMCIFP	AUMCINF_pred	9.1953427	9.1953427	0
3	AUMCIFP	AUMCINF_pred	5.9887901	5.9887901	0
4	AUMCIFP	AUMCINF_pred	5.2113018	5.2113018	0
5	AUMCIFP	AUMCINF_pred	6.0525342	6.0525342	0
6	AUMCIFP	AUMCINF_pred	7.2552635	7.2552635	0
1	AUMCPEP	AUMC_.Extrap_pred	58.1415337	58.1415337	0
2	AUMCPEP	AUMC_.Extrap_pred	30.4131425	30.4131425	0
3	AUMCPEP	AUMC_.Extrap_pred	16.4063210	16.4063210	0
4	AUMCPEP	AUMC_.Extrap_pred	15.9159231	15.9159230	0
5	AUMCPEP	AUMC_.Extrap_pred	38.7446663	38.7446663	0
6	AUMCPEP	AUMC_.Extrap_pred	23.7450164	23.7450164	0
1	MRTEVLST	MRTlast	1.8786791	1.8786791	0
2	MRTEVLST	MRTlast	2.1820119	2.1820119	0

Table 8: Indometh (n=6), Linear, Extravascular *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
3	MRTEVLST	MRTlast	1.7064337	1.7064337	0
4	MRTEVLST	MRTlast	1.7686680	1.7686680	0
5	MRTEVLST	MRTlast	1.8976328	1.8976328	0
6	MRTEVLST	MRTlast	1.9260226	1.9260226	0
1	MRTEVIFO	MRTINF_obs	3.7881905	3.7881905	0
2	MRTEVIFO	MRTINF_obs	2.9374621	2.9374621	0
3	MRTEVIFO	MRTINF_obs	2.2324203	2.2324203	0
4	MRTEVIFO	MRTINF_obs	2.2976312	2.2976312	0
5	MRTEVIFO	MRTINF_obs	2.9874239	2.9874239	0
6	MRTEVIFO	MRTINF_obs	2.6508069	2.6508069	0
1	MRTEVIFP	MRTINF_pred	3.7962178	3.7962178	0
2	MRTEVIFP	MRTINF_pred	2.8917929	2.8917929	0
3	MRTEVIFP	MRTINF_pred	1.9774801	1.9774801	0
4	MRTEVIFP	MRTINF_pred	2.0374249	2.0374249	0
5	MRTEVIFP	MRTINF_pred	2.8152890	2.8152890	0
6	MRTEVIFP	MRTINF_pred	2.3932186	2.3932186	0

A.8 Test 8: Indometh (n=6), Log, Extravascular

```
table_wres_rres(Wres8, Rres8,
                Caption = 'Indometh (n=6), Log, Extravascular')
```

Table 9: Indometh (n=6), Log, Extravascular

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
1	R2	Rsq	0.9970667	0.9970667	0
2	R2	Rsq	0.9476691	0.9476691	0
3	R2	Rsq	0.8758261	0.8758261	0
4	R2	Rsq	0.8671179	0.8671179	0
5	R2	Rsq	0.8752442	0.8752442	0
6	R2	Rsq	0.9039538	0.9039538	0
1	R2ADJ	Rsq_adjusted	0.9941335	0.9941335	0
2	R2ADJ	Rsq_adjusted	0.9401933	0.9401933	0
3	R2ADJ	Rsq_adjusted	0.8603043	0.8603043	0
4	R2ADJ	Rsq_adjusted	0.8505077	0.8505077	0
5	R2ADJ	Rsq_adjusted	0.8544516	0.8544516	0
6	R2ADJ	Rsq_adjusted	0.8902329	0.8902329	0
1	CORRXY	Corr_XY	-0.9985323	-0.9985323	0
2	CORRXY	Corr_XY	-0.9734830	-0.9734830	0
3	CORRXY	Corr_XY	-0.9358558	-0.9358558	0
4	CORRXY	Corr_XY	-0.9311917	-0.9311917	0
5	CORRXY	Corr_XY	-0.9355449	-0.9355449	0

Table 9: Indometh (n=6), Log, Extravascular *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
6	CORRXY	Corr_XY	-0.9507649	-0.9507649	0
1	LAMZNPT	No_points_lambda_z	3.0000000	3.0000000	0
2	LAMZNPT	No_points_lambda_z	9.0000000	9.0000000	0
3	LAMZNPT	No_points_lambda_z	10.0000000	10.0000000	0
4	LAMZNPT	No_points_lambda_z	10.0000000	10.0000000	0
5	LAMZNPT	No_points_lambda_z	8.0000000	8.0000000	0
6	LAMZNPT	No_points_lambda_z	9.0000000	9.0000000	0
1	LAMZ	Lambda_z	0.1583205	0.1583205	0
2	LAMZ	Lambda_z	0.3022800	0.3022800	0
3	LAMZ	Lambda_z	0.4218926	0.4218926	0
4	LAMZ	Lambda_z	0.4290762	0.4290762	0
5	LAMZ	Lambda_z	0.2527478	0.2527478	0
6	LAMZ	Lambda_z	0.3535205	0.3535205	0
1	LAMZLL	Lambda_z_lower	5.0000000	5.0000000	0
2	LAMZLL	Lambda_z_lower	0.7500000	0.7500000	0
3	LAMZLL	Lambda_z_lower	0.5000000	0.5000000	0
4	LAMZLL	Lambda_z_lower	0.5000000	0.5000000	0
5	LAMZLL	Lambda_z_lower	1.0000000	1.0000000	0
6	LAMZLL	Lambda_z_lower	0.7500000	0.7500000	0
1	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
2	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
3	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
4	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
5	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
6	LAMZUL	Lambda_z_upper	8.0000000	8.0000000	0
1	LAMZHL	HL_Lambda_z	4.3781270	4.3781270	0
2	LAMZHL	HL_Lambda_z	2.2930632	2.2930632	0
3	LAMZHL	HL_Lambda_z	1.6429468	1.6429468	0
4	LAMZHL	HL_Lambda_z	1.6154409	1.6154409	0
5	LAMZHL	HL_Lambda_z	2.7424461	2.7424461	0
6	LAMZHL	HL_Lambda_z	1.9606986	1.9606986	0
1	TLAG	Tlag	0.0000000	0.0000000	0
2	TLAG	Tlag	0.0000000	0.0000000	0
3	TLAG	Tlag	0.0000000	0.0000000	0
4	TLAG	Tlag	0.0000000	0.0000000	0
5	TLAG	Tlag	0.0000000	0.0000000	0
6	TLAG	Tlag	0.0000000	0.0000000	0
1	TMAX	Tmax	0.2500000	0.2500000	0
2	TMAX	Tmax	0.2500000	0.2500000	0
3	TMAX	Tmax	0.2500000	0.2500000	0
4	TMAX	Tmax	0.2500000	0.2500000	0
5	TMAX	Tmax	0.2500000	0.2500000	0
6	TMAX	Tmax	0.2500000	0.2500000	0
1	CMAX	Cmax	1.5000000	1.5000000	0
2	CMAX	Cmax	2.0300000	2.0300000	0

Table 9: Indometh (n=6), Log, Extravascular *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
3	CMAX	Cmax	2.7200000	2.7200000	0
4	CMAX	Cmax	1.8500000	1.8500000	0
5	CMAX	Cmax	2.0500000	2.0500000	0
6	CMAX	Cmax	2.3100000	2.3100000	0
1	CMAXD	Cmax_D	0.0600000	0.0600000	0
2	CMAXD	Cmax_D	0.0812000	0.0812000	0
3	CMAXD	Cmax_D	0.1088000	0.1088000	0
4	CMAXD	Cmax_D	0.0740000	0.0740000	0
5	CMAXD	Cmax_D	0.0820000	0.0820000	0
6	CMAXD	Cmax_D	0.0924000	0.0924000	0
1	TLST	Tlast	8.0000000	8.0000000	0
2	TLST	Tlast	8.0000000	8.0000000	0
3	TLST	Tlast	8.0000000	8.0000000	0
4	TLST	Tlast	8.0000000	8.0000000	0
5	TLST	Tlast	8.0000000	8.0000000	0
6	TLST	Tlast	8.0000000	8.0000000	0
1	CLST	Clast	0.0500000	0.0500000	0
2	CLST	Clast	0.0800000	0.0800000	0
3	CLST	Clast	0.0800000	0.0800000	0
4	CLST	Clast	0.0700000	0.0700000	0
5	CLST	Clast	0.0600000	0.0600000	0
6	CLST	Clast	0.0900000	0.0900000	0
1	AUCLST	AUClast	1.7193653	1.7193653	0
2	AUCLST	AUClast	2.8891436	2.8891436	0
3	AUCLST	AUClast	2.8817113	2.8817113	0
4	AUCLST	AUClast	2.4442459	2.4442459	0
5	AUCLST	AUClast	1.9211984	1.9211984	0
6	AUCLST	AUClast	2.8413138	2.8413138	0
1	AUCALL	AUCall	1.7193653	1.7193653	0
2	AUCALL	AUCall	2.8891436	2.8891436	0
3	AUCALL	AUCall	2.8817113	2.8817113	0
4	AUCALL	AUCall	2.4442459	2.4442459	0
5	AUCALL	AUCall	1.9211984	1.9211984	0
6	AUCALL	AUCall	2.8413138	2.8413138	0
1	AUCIFO	AUCINF_obs	2.0351804	2.0351804	0
2	AUCIFO	AUCINF_obs	3.1537989	3.1537989	0
3	AUCIFO	AUCINF_obs	3.0713330	3.0713330	0
4	AUCIFO	AUCINF_obs	2.6073871	2.6073871	0
5	AUCIFO	AUCINF_obs	2.1585892	2.1585892	0
6	AUCIFO	AUCINF_obs	3.0958959	3.0958959	0
1	AUCIFOD	AUCINF_D_obs	0.0814072	0.0814072	0
2	AUCIFOD	AUCINF_D_obs	0.1261520	0.1261520	0
3	AUCIFOD	AUCINF_D_obs	0.1228533	0.1228533	0
4	AUCIFOD	AUCINF_D_obs	0.1042955	0.1042955	0
5	AUCIFOD	AUCINF_D_obs	0.0863436	0.0863436	0

Table 9: Indometh (n=6), Log, Extravascular *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
6	AUCIFOD	AUCINF_D_obs	0.1238358	0.1238358	0
1	AUCPEO	AUC_.Extrap_obs	15.5177942	15.5177942	0
2	AUCPEO	AUC_.Extrap_obs	8.3916343	8.3916343	0
3	AUCPEO	AUC_.Extrap_obs	6.1739217	6.1739217	0
4	AUCPEO	AUC_.Extrap_obs	6.2568848	6.2568848	0
5	AUCPEO	AUC_.Extrap_obs	10.9974979	10.9974979	0
6	AUCPEO	AUC_.Extrap_obs	8.2232127	8.2232127	0
1	VZFO	Vz_F_obs	77.5889712	77.5889712	0
2	VZFO	Vz_F_obs	26.2238573	26.2238573	0
3	VZFO	Vz_F_obs	19.2935053	19.2935053	0
4	VZFO	Vz_F_obs	22.3460171	22.3460171	0
5	VZFO	Vz_F_obs	45.8229078	45.8229078	0
6	VZFO	Vz_F_obs	22.8422576	22.8422576	0
1	CLFO	Cl_F_obs	12.2839234	12.2839234	0
2	CLFO	Cl_F_obs	7.9269481	7.9269481	0
3	CLFO	Cl_F_obs	8.1397881	8.1397881	0
4	CLFO	Cl_F_obs	9.5881430	9.5881430	0
5	CLFO	Cl_F_obs	11.5816384	11.5816384	0
6	CLFO	Cl_F_obs	8.0752068	8.0752068	0
1	AUCIFP	AUCINF_pred	2.0367500	2.0367500	0
2	AUCIFP	AUCINF_pred	3.1364504	3.1364504	0
3	AUCIFP	AUCINF_pred	2.9764572	2.9764572	0
4	AUCIFP	AUCINF_pred	2.5245343	2.5245343	0
5	AUCIFP	AUCINF_pred	2.1173287	2.1173287	0
6	AUCIFP	AUCINF_pred	3.0004063	3.0004063	0
1	AUCIFPD	AUCINF_D_pred	0.0814700	0.0814700	0
2	AUCIFPD	AUCINF_D_pred	0.1254580	0.1254580	0
3	AUCIFPD	AUCINF_D_pred	0.1190583	0.1190583	0
4	AUCIFPD	AUCINF_D_pred	0.1009814	0.1009814	0
5	AUCIFPD	AUCINF_D_pred	0.0846931	0.0846931	0
6	AUCIFPD	AUCINF_D_pred	0.1200163	0.1200163	0
1	AUCPEP	AUC_.Extrap_pred	15.5829013	15.5829013	0
2	AUCPEP	AUC_.Extrap_pred	7.8849267	7.8849267	0
3	AUCPEP	AUC_.Extrap_pred	3.1831752	3.1831752	0
4	AUCPEP	AUC_.Extrap_pred	3.1803265	3.1803265	0
5	AUCPEP	AUC_.Extrap_pred	9.2630996	9.2630996	0
6	AUCPEP	AUC_.Extrap_pred	5.3023656	5.3023656	0
1	VZFP	Vz_F_pred	77.5291765	77.5291765	0
2	VZFP	Vz_F_pred	26.3689077	26.3689077	0
3	VZFP	Vz_F_pred	19.9084941	19.9084941	0
4	VZFP	Vz_F_pred	23.0793917	23.0793917	0
5	VZFP	Vz_F_pred	46.7158621	46.7158621	0
6	VZFP	Vz_F_pred	23.5692251	23.5692252	0
1	CLFP	Cl_F_pred	12.2744566	12.2744566	0
2	CLFP	Cl_F_pred	7.9707940	7.9707940	0

Table 9: Indometh (n=6), Log, Extravascular *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
3	CLFP	Cl_F_pred	8.3992473	8.3992473	0
4	CLFP	Cl_F_pred	9.9028165	9.9028165	0
5	CLFP	Cl_F_pred	11.8073306	11.8073306	0
6	CLFP	Cl_F_pred	8.3322048	8.3322048	0
1	AUMCLST	AUMClast	3.2965543	3.2965543	0
2	AUMCLST	AUMClast	6.4082620	6.4082620	0
3	AUMCLST	AUMClast	5.0353383	5.0353382	0
4	AUMCLST	AUMClast	4.3990453	4.3990453	0
5	AUMCLST	AUMClast	3.7299741	3.7299741	0
6	AUMCLST	AUMClast	5.5775672	5.5775672	0
1	AUMCIFO	AUMCINF_obs	7.8178588	7.8178588	0
2	AUMCIFO	AUMCINF_obs	9.4010343	9.4010343	0
3	AUMCIFO	AUMCINF_obs	7.0017667	7.0017667	0
4	AUMCIFO	AUMCINF_obs	6.0843899	6.0843899	0
5	AUMCIFO	AUMCINF_obs	6.5683405	6.5683405	0
6	AUMCIFO	AUMCINF_obs	8.3343579	8.3343579	0
1	AUMCPEO	AUMC_.Extrap_obs	57.8330281	57.8330281	0
2	AUMCPEO	AUMC_.Extrap_obs	31.8345005	31.8345005	0
3	AUMCPEO	AUMC_.Extrap_obs	28.0847466	28.0847466	0
4	AUMCPEO	AUMC_.Extrap_obs	27.6994849	27.6994849	0
5	AUMCPEO	AUMC_.Extrap_obs	43.2128382	43.2128382	0
6	AUMCPEO	AUMC_.Extrap_obs	33.0774222	33.0774222	0
1	AUMCIFP	AUMCINF_pred	7.8403303	7.8403303	0
2	AUMCIFP	AUMCINF_pred	9.2048546	9.2048546	0
3	AUMCIFP	AUMCINF_pred	6.0178784	6.0178784	0
4	AUMCIFP	AUMCINF_pred	5.2284721	5.2284721	0
5	AUMCIFP	AUMCINF_pred	6.0750083	6.0750083	0
6	AUMCIFP	AUMCINF_pred	7.3003307	7.3003307	0
1	AUMCPEP	AUMC_.Extrap_pred	57.9538845	57.9538845	0
2	AUMCPEP	AUMC_.Extrap_pred	30.3817147	30.3817147	0
3	AUMCPEP	AUMC_.Extrap_pred	16.3270188	16.3270188	0
4	AUMCPEP	AUMC_.Extrap_pred	15.8636553	15.8636553	0
5	AUMCPEP	AUMC_.Extrap_pred	38.6013327	38.6013327	0
6	AUMCPEP	AUMC_.Extrap_pred	23.5984312	23.5984312	0
1	MRTEVLST	MRTlast	1.9173089	1.9173089	0
2	MRTEVLST	MRTlast	2.2180490	2.2180490	0
3	MRTEVLST	MRTlast	1.7473430	1.7473430	0
4	MRTEVLST	MRTlast	1.7997556	1.7997556	0
5	MRTEVLST	MRTlast	1.9414830	1.9414830	0
6	MRTEVLST	MRTlast	1.9630240	1.9630240	0
1	MRTEVIFO	MRTINF_obs	3.8413591	3.8413591	0
2	MRTEVIFO	MRTINF_obs	2.9808604	2.9808604	0
3	MRTEVIFO	MRTINF_obs	2.2797159	2.2797159	0
4	MRTEVIFO	MRTINF_obs	2.3335200	2.3335200	0
5	MRTEVIFO	MRTINF_obs	3.0428858	3.0428858	0

Table 9: Indometh (n=6), Log, Extravascular *(continued)*

	Pharmacokinetic Parameters		Values		
Subject	PPTESTCD	WNL	NonCompart	WinNonlin	Difference
6	MRTEVIFO	MRTINF_obs	2.6920666	2.6920666	0
1	MRTEVIFP	MRTINF_pred	3.8494318	3.8494318	0
2	MRTEVIFP	MRTINF_pred	2.9348000	2.9348000	0
3	MRTEVIFP	MRTINF_pred	2.0218260	2.0218260	0
4	MRTEVIFP	MRTINF_pred	2.0710640	2.0710640	0
5	MRTEVIFP	MRTINF_pred	2.8691853	2.8691853	0
6	MRTEVIFP	MRTINF_pred	2.4331140	2.4331140	0

B Session Information

```
devtools::session_info()
```

```
##  setting  value
##  version  R version 3.4.4 (2018-03-15)
##  system   x86_64, mingw32
##  ui       RTerm
##  language (EN)
##  collate  Korean_Korea.949
##  tz       Asia/Seoul
##  date     2018-03-20
##
##  package     * version    date       source
##  assertthat    0.2.0      2017-04-11 CRAN (R 3.4.0)
##  backports     1.1.2      2017-12-13 CRAN (R 3.4.3)
##  base        * 3.4.4      2018-03-15 local
##  bindr         0.1.1      2018-03-13 CRAN (R 3.4.3)
##  bindrcpp    * 0.2.0.9000 2018-02-08 Github (krlmlr/bindrcpp@7553d4f)
##  bookdown      0.7        2018-02-18 CRAN (R 3.4.3)
##  colorspace    1.3-2      2016-12-14 CRAN (R 3.4.0)
##  compiler      3.4.4      2018-03-15 local
##  datasets    * 3.4.4      2018-03-15 local
##  devtools      1.13.5     2018-02-18 CRAN (R 3.4.3)
##  digest        0.6.15     2018-01-28 CRAN (R 3.4.3)
##  dplyr       * 0.7.4.9000 2018-02-08 Github (tidyverse/dplyr@0a2c208)
##  evaluate      0.10.1     2017-06-24 CRAN (R 3.4.1)
##  glue          1.2.0      2017-10-29 CRAN (R 3.4.2)
##  graphics    * 3.4.4      2018-03-15 local
##  grDevices   * 3.4.4      2018-03-15 local
##  highr         0.6        2016-05-09 CRAN (R 3.4.0)
##  hms           0.4.2      2018-03-10 CRAN (R 3.4.3)
##  htmltools     0.3.6      2017-04-28 CRAN (R 3.4.0)
##  httr          1.3.1      2017-08-20 CRAN (R 3.4.1)
##  kableExtra  * 0.7.0      2018-01-15 CRAN (R 3.4.3)
##  knitr       * 1.20       2018-02-20 CRAN (R 3.4.3)
##  magrittr      1.5        2014-11-22 CRAN (R 3.4.0)
##  memoise       1.1.0      2017-04-21 CRAN (R 3.4.0)
```

```
##  methods       3.4.4      2018-03-15 local
##  munsell       0.4.3      2016-02-13 CRAN (R 3.4.0)
##  NonCompart  * 0.4.1      2018-03-19 CRAN (R 3.4.4)
##  pillar        1.2.1      2018-02-27 CRAN (R 3.4.3)
##  pkgconfig     2.0.1      2017-03-21 CRAN (R 3.4.0)
##  plyr          1.8.4      2016-06-08 CRAN (R 3.4.0)
##  purrr         0.2.4.9000 2018-03-02 Github (tidyverse/purrr@84ce1ad)
##  R6            2.2.2      2017-06-17 CRAN (R 3.4.1)
##  Rcpp          0.12.16    2018-03-13 CRAN (R 3.4.4)
##  readr         1.1.1      2017-05-16 CRAN (R 3.4.0)
##  rlang         0.2.0      2018-02-20 CRAN (R 3.4.3)
##  rmarkdown     1.9        2018-03-01 CRAN (R 3.4.3)
##  rprojroot     1.3-2      2018-01-03 CRAN (R 3.4.3)
##  rvest         0.3.2      2016-06-17 CRAN (R 3.4.0)
##  scales        0.5.0      2017-08-24 CRAN (R 3.4.1)
##  stats       * 3.4.4      2018-03-15 local
##  stringi       1.1.7      2018-03-12 CRAN (R 3.4.4)
##  stringr       1.3.0      2018-02-19 CRAN (R 3.4.3)
##  tibble        1.4.2      2018-01-22 CRAN (R 3.4.3)
##  tidyr       * 0.8.0      2018-01-29 CRAN (R 3.4.3)
##  tidyselect    0.2.4      2018-02-26 CRAN (R 3.4.3)
##  tools         3.4.4      2018-03-15 local
##  utils       * 3.4.4      2018-03-15 local
##  viridisLite   0.3.0      2018-02-01 CRAN (R 3.4.3)
##  withr         2.1.2      2018-03-15 CRAN (R 3.4.4)
##  xfun          0.1        2018-01-22 CRAN (R 3.4.3)
##  xml2          1.2.0      2018-01-24 CRAN (R 3.4.3)
##  yaml          2.1.18     2018-03-08 CRAN (R 3.4.3)
```

References

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Kim, Hyungsub, Sungpil Han, Yong-Soon Cho, Seok-Kyu Yoon, and Kyun-Seop Bae. 2018. "Development of R Packages: 'NonCompart' and 'Ncar' for Noncompartmental Analysis (Nca)." *Translational and Clinical Pharmacology* 26 (1). Korean Society for Clinical Pharmacology; Therapeutics (KAMJE):01–48. http://www.tcpharm.org/Data/Journal/2/358.pdf.