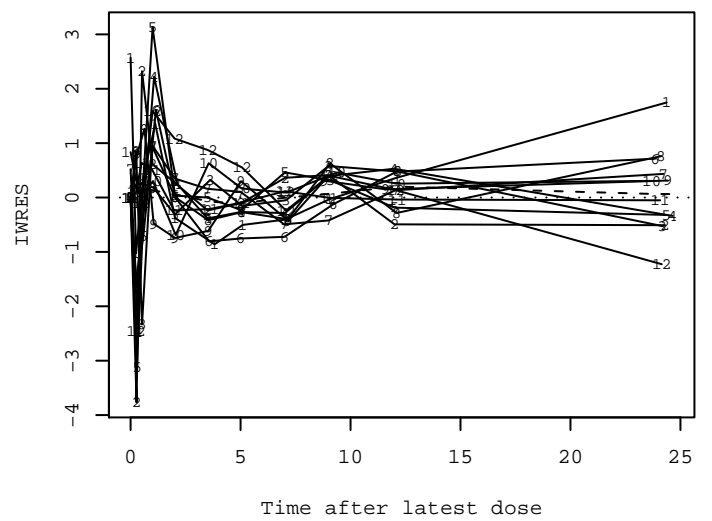
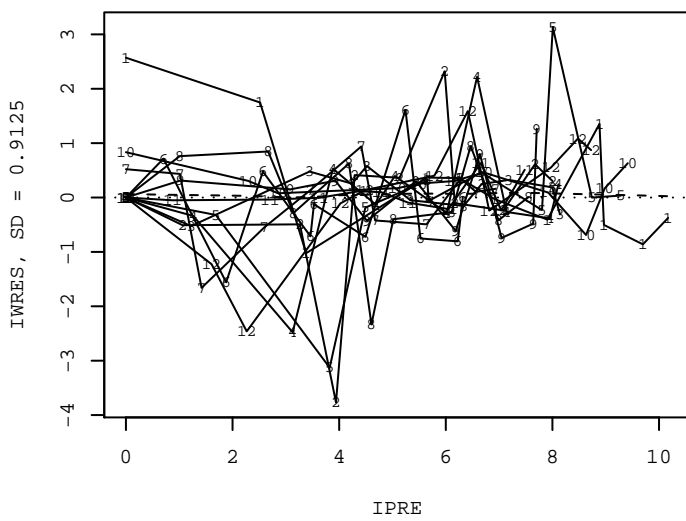
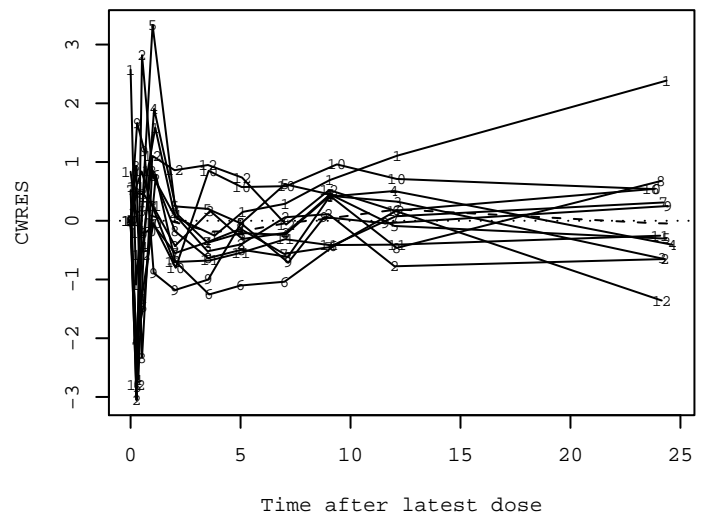
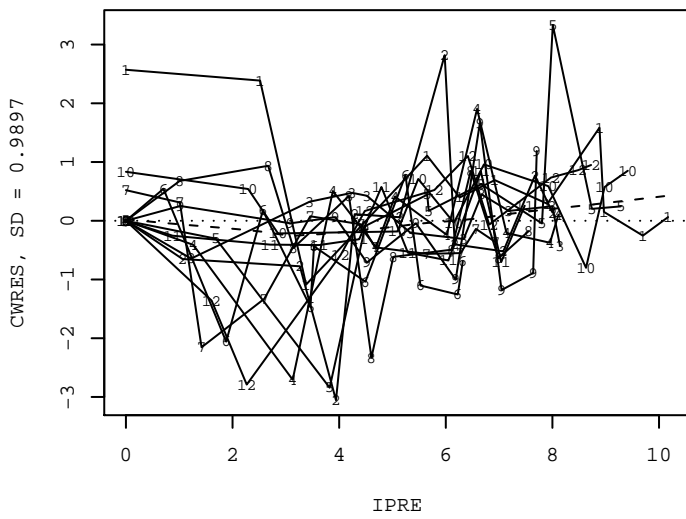
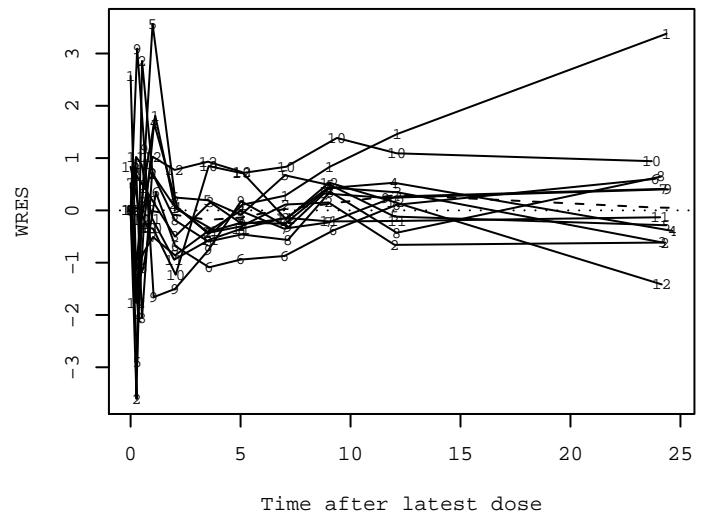
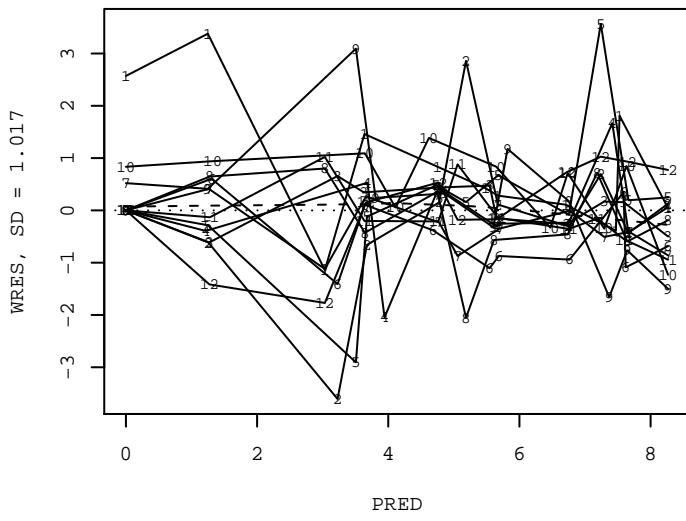
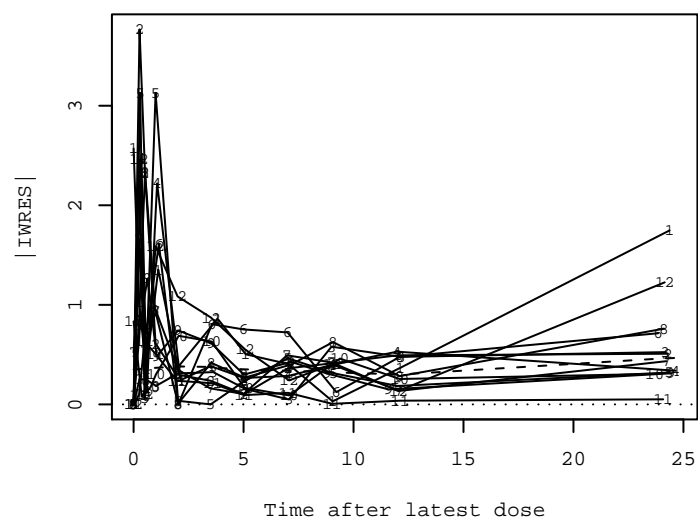
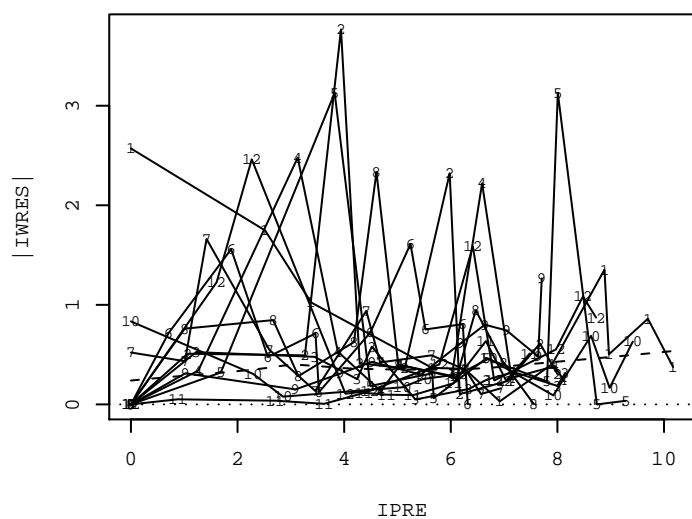
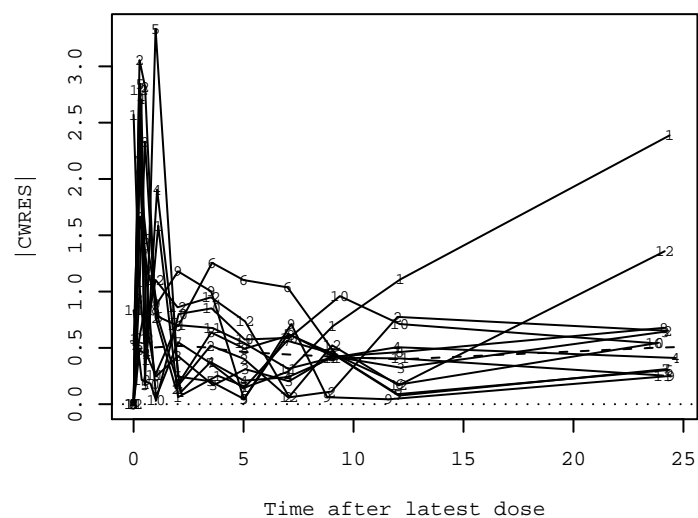
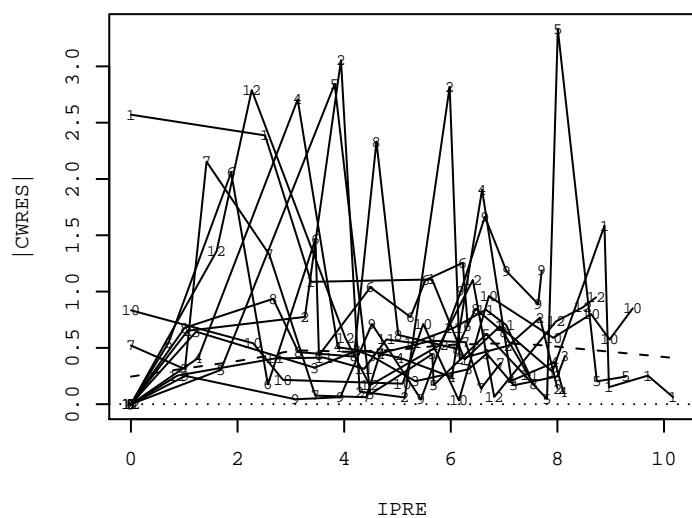
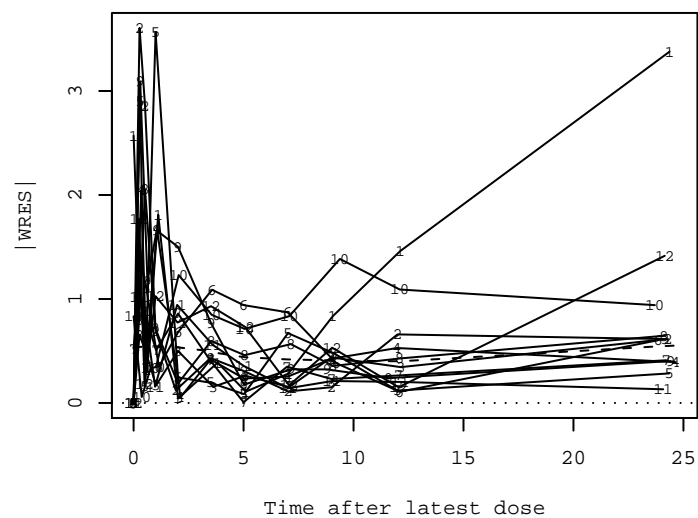
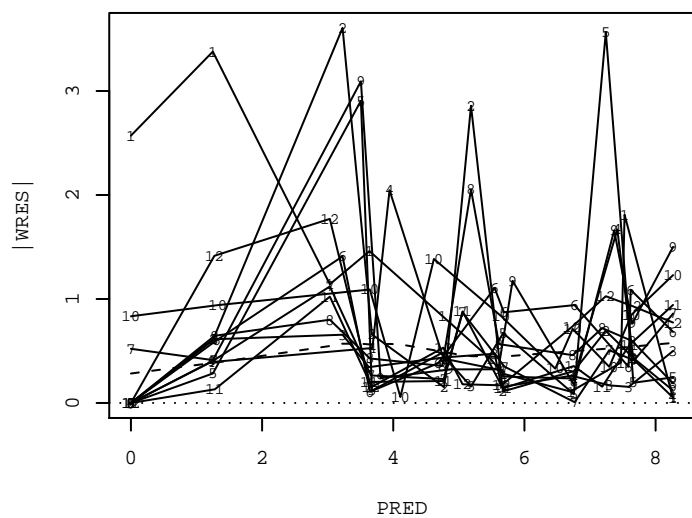


# Residuals of Model 1001

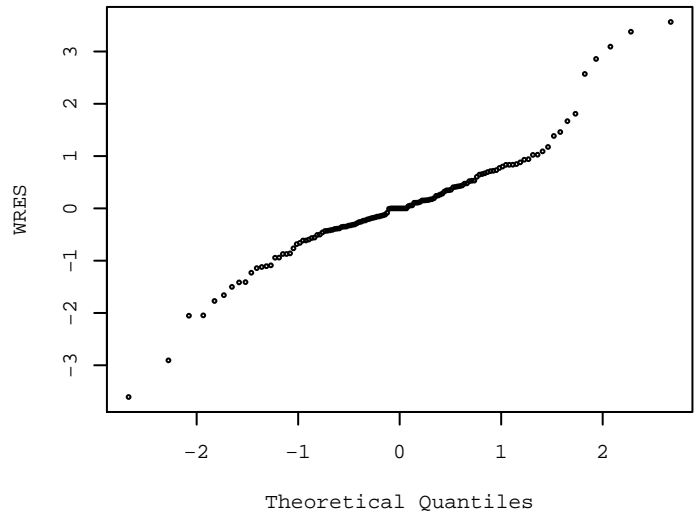
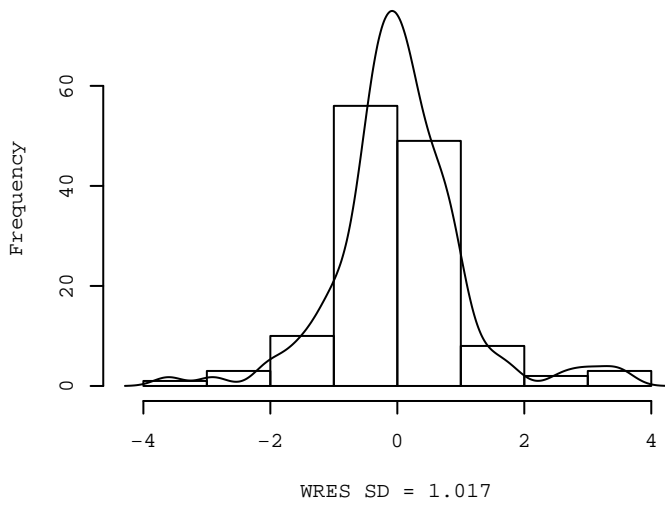


# Absolute Values of Residuals of Model 1001

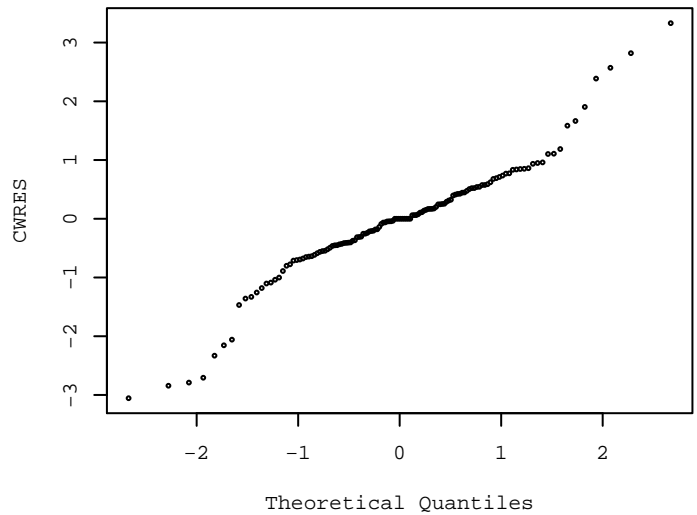
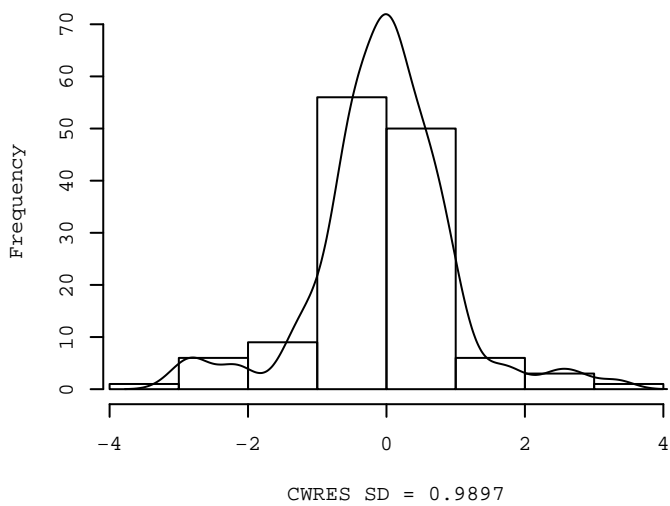


## Distribution of Residuals of Model 1001

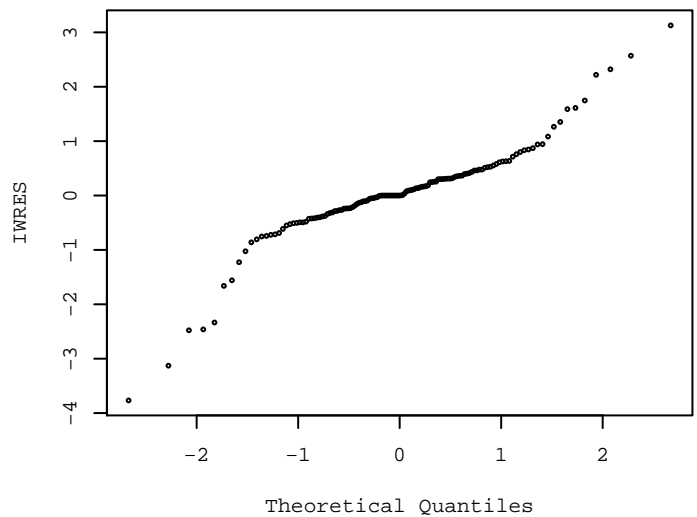
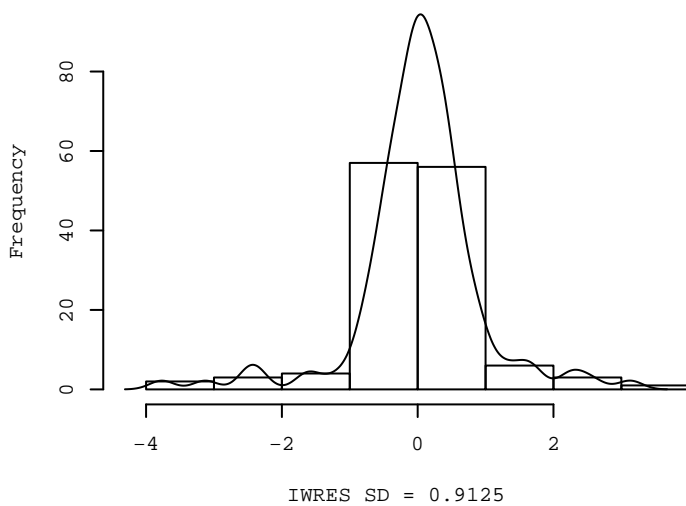
Shapiro-Wilk test p-value = 4.23e-06



Shapiro-Wilk test p-value = 2.343e-05



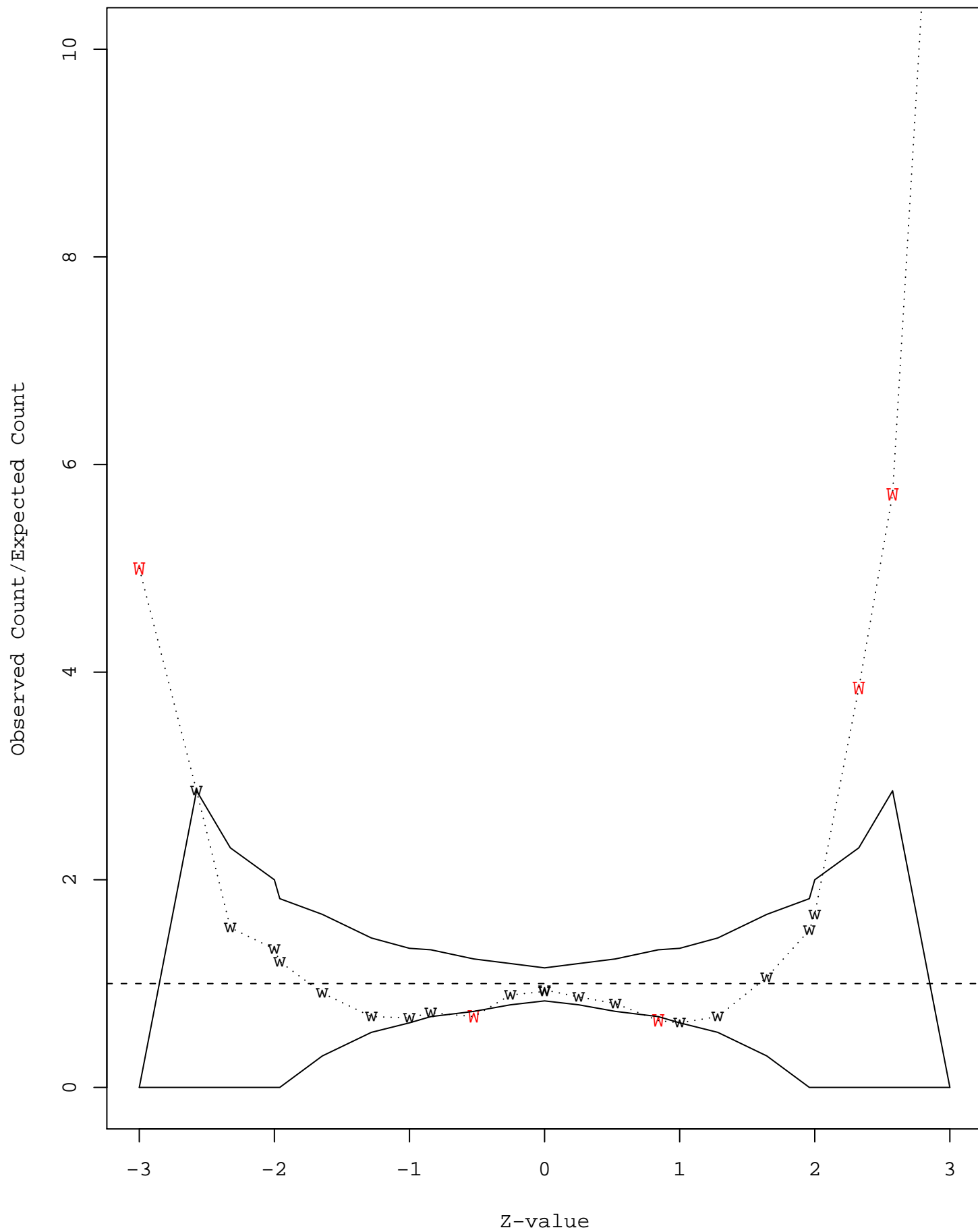
Shapiro-Wilk test p-value = 2.422e-08



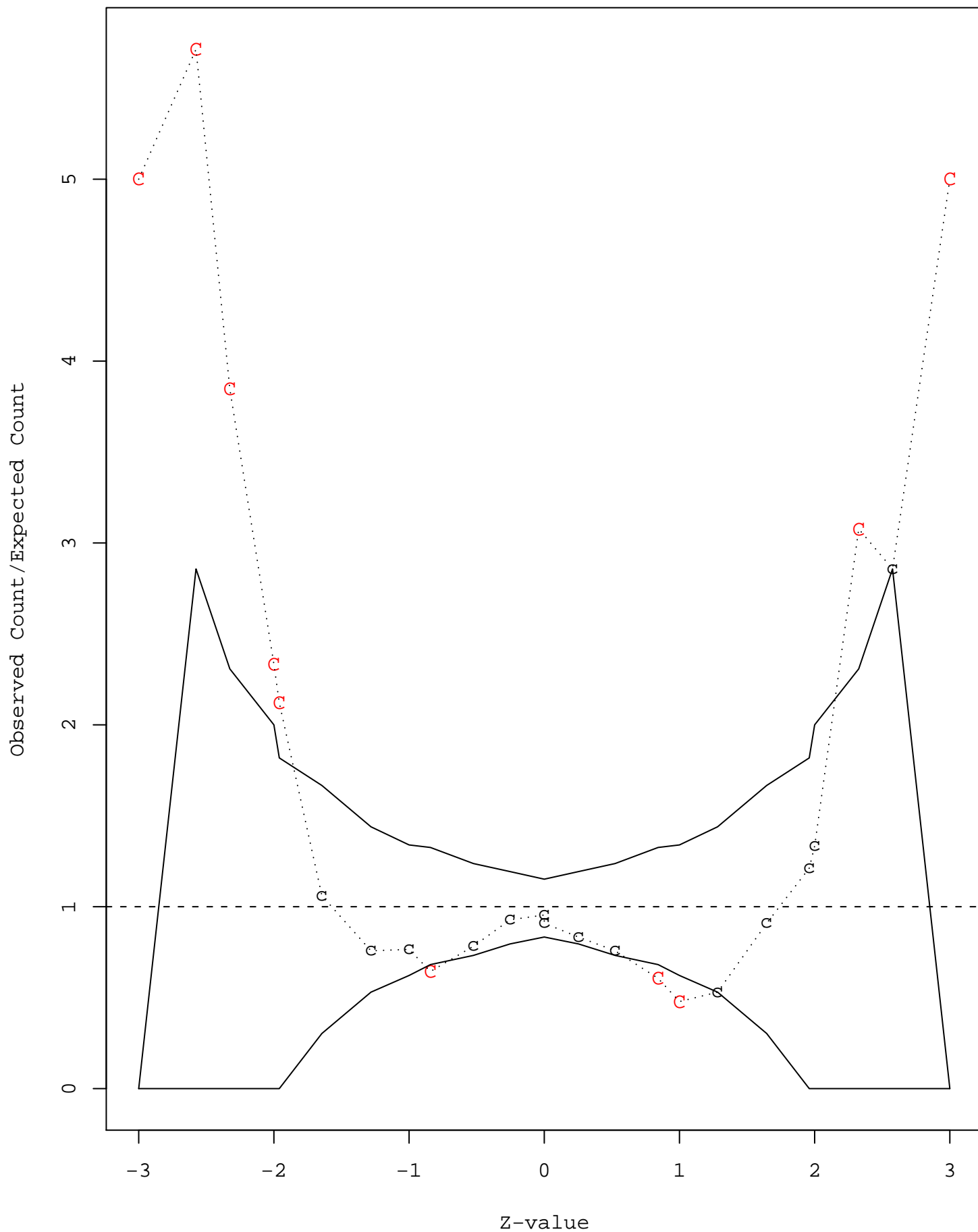
# Test of residual counts using binomial distribution

	Z-value	Percent	Expected	LB	UB	WRES	Cnt	WRES	p-val	CWRE	Cnt	CWRE	p-val	IWRE	Cnt	IWRE	p-val
[1,]	-3.000	0.13	0.2	0	0		1		0.014		1		0.014		2		0.001
[2,]	-2.576	0.50	0.7	0	2		2		0.029		4		0.001		2		0.029
[3,]	-2.326	1.00	1.3	0	3		2		0.147		5		0.002		5		0.002
[4,]	-2.000	2.28	3.0	0	6		4		0.183		7		0.011		5		0.082
[5,]	-1.960	2.50	3.3	0	6		4		0.236		7		0.018		5		0.115
[6,]	-1.645	5.00	6.6	2	11		6		0.492		7		0.340		6		0.492
[7,]	-1.282	10.00	13.2	7	19		9		0.139		10		0.221		7		0.041
[8,]	-1.000	15.87	20.9	13	28		14		0.057		16		0.144		9		0.001
[9,]	-0.842	20.00	26.4	18	35		19		0.063		17		0.022		10		0.000
[10,]	-0.524	30.00	39.6	29	49		27		0.009		31		0.060		19		0.000
[11,]	-0.253	40.00	52.8	42	63		47		0.173		49		0.280		38		0.005
[12,]	0.000	50.00	66.0	55	76		61		0.217		63		0.332		57		0.069
[13,]	0.000	50.00	66.0	55	76		62		0.271		60		0.169		66		0.465
[14,]	0.253	40.00	52.8	42	63		46		0.131		44		0.069		49		0.280
[15,]	0.524	30.00	39.6	29	49		32		0.087		30		0.039		25		0.003
[16,]	0.842	20.00	26.4	18	35		17		0.022		16		0.012		14		0.003
[17,]	1.000	15.87	20.9	13	28		13		0.033		10		0.004		10		0.004
[18,]	1.282	10.00	13.2	7	19		9		0.139		7		0.041		8		0.080
[19,]	1.645	5.00	6.6	2	11		7		0.340		6		0.492		5		0.349
[20,]	1.960	2.50	3.3	0	6		5		0.115		4		0.236		4		0.236
[21,]	2.000	2.28	3.0	0	6		5		0.082		4		0.183		4		0.183
[22,]	2.326	1.00	1.3	0	3		5		0.002		4		0.011		2		0.147
[23,]	2.576	0.50	0.7	0	2		4		0.001		2		0.029		1		0.142
[24,]	3.000	0.13	0.2	0	0		3		0.000		1		0.014		1		0.014

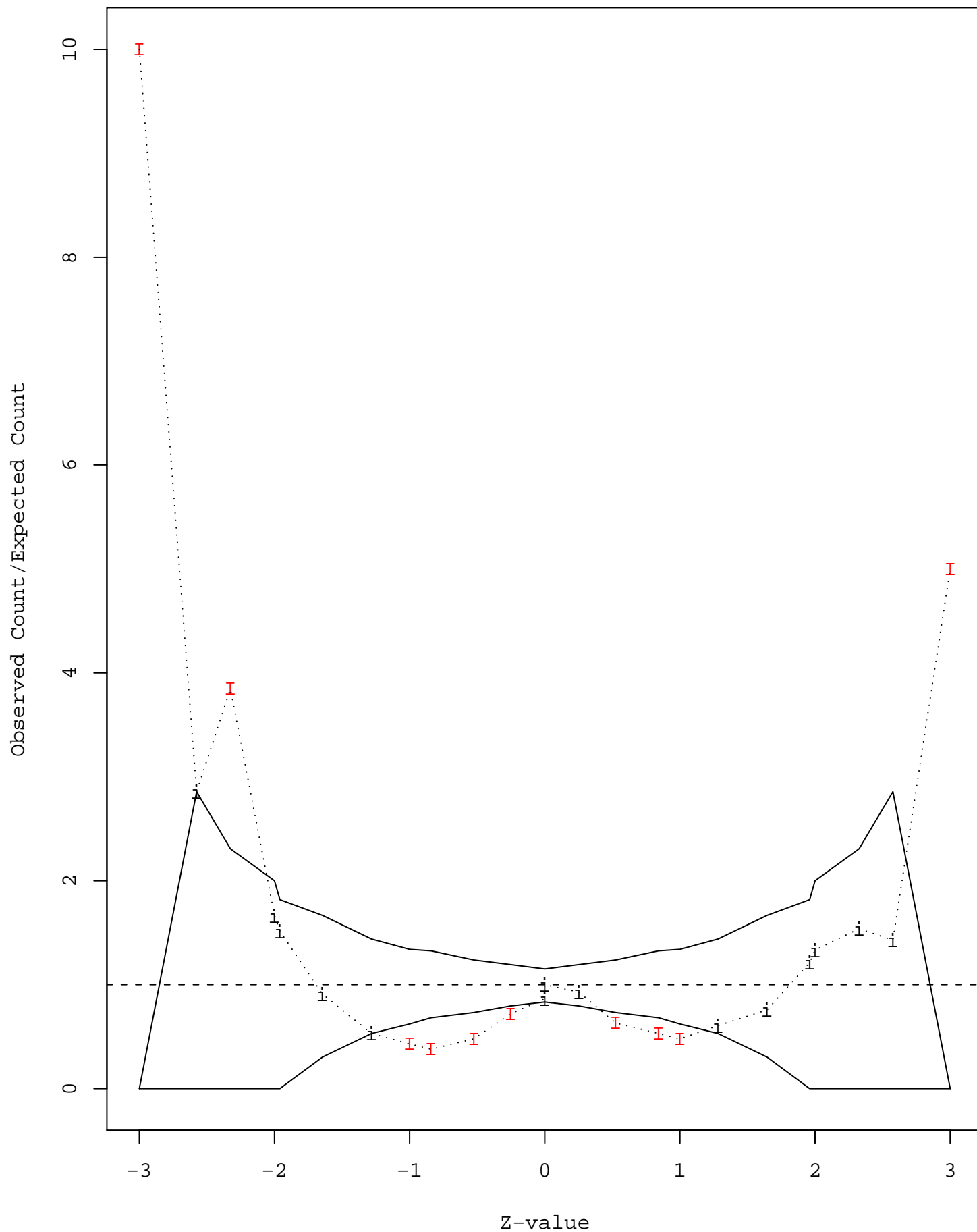
# Ratio of WRES Count to Expected Count



Ratio of CWRES Count to Expected Count



Ratio of IWRES Count to Expected Count



# Extreme WRES values larger than 3

	ID	TIME	DV	PRED	IPRE	WRES	CWRE	IWRE
12	1	24.37	3.28	1.2485	2.5167	3.3787	2.386942	1.74750
15	2	0.27	1.72	3.2270	3.9403	-3.6064	-3.054944	-3.76710
53	5	1.00	11.40	7.2409	8.0076	3.5652	3.330559	3.12910
99	9	0.30	7.37	3.5066	6.6392	3.0928	1.665080	0.80034



# Extreme WRES values larger than 2

	ID	TIME	DV	PRED	IPRE	WRES	CWRE	IWRE
2	1	0.00	0.74	0.0000	0.0000	2.5709	2.570873	2.57090
12	1	24.37	3.28	1.2485	2.5167	3.3787	2.386942	1.74750
15	2	0.27	1.72	3.2270	3.9403	-3.6064	-3.054944	-3.76710
16	2	0.52	7.91	5.1854	5.9789	2.8579	2.819601	2.32160
39	4	0.35	1.89	3.9433	3.1280	-2.0454	-2.706425	-2.47830
51	5	0.30	2.02	3.5066	3.8217	-2.9059	-2.842478	-3.12830
53	5	1.00	11.40	7.2409	8.0076	3.5652	3.330559	3.12910
88	8	0.52	3.05	5.1854	4.6057	-2.0522	-2.330698	-2.33400
99	9	0.30	7.37	3.5066	6.6392	3.0928	1.665080	0.80034

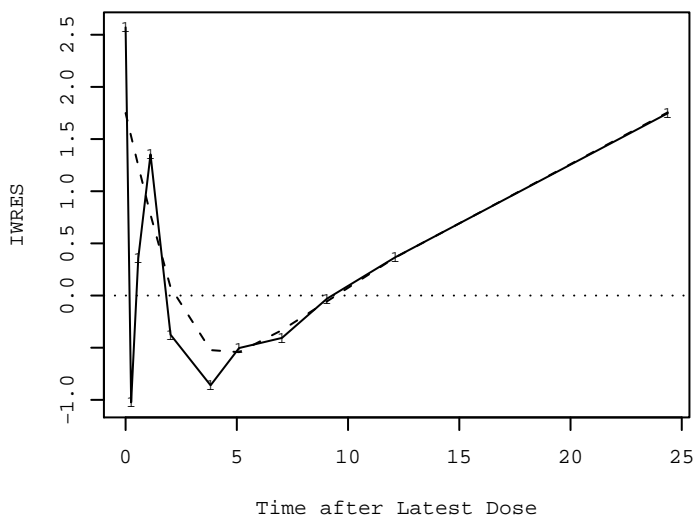
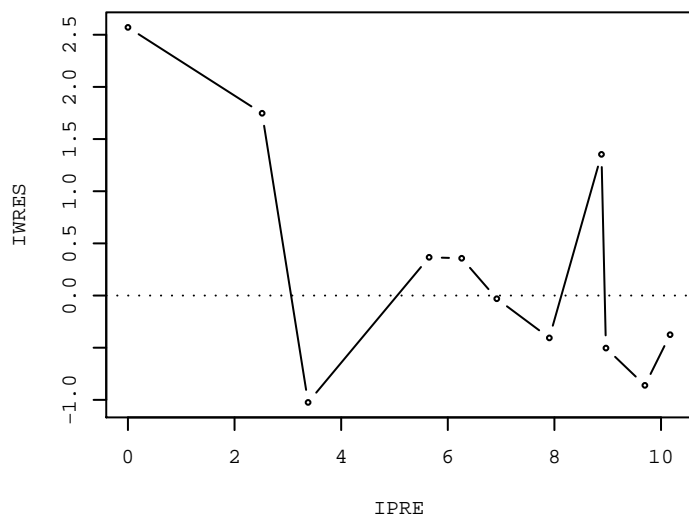
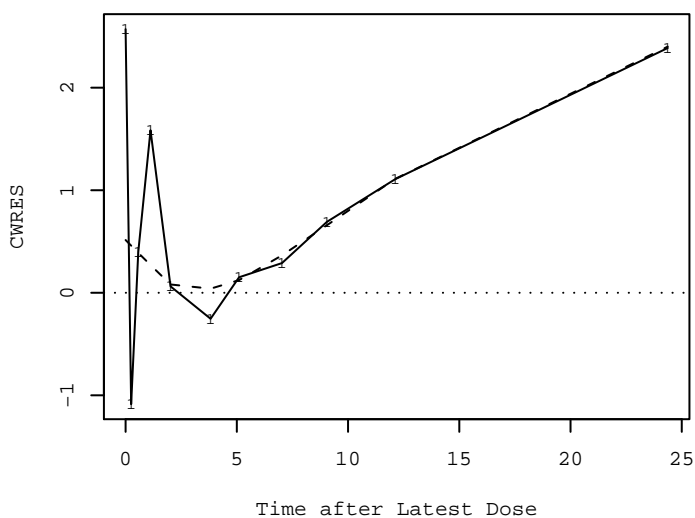
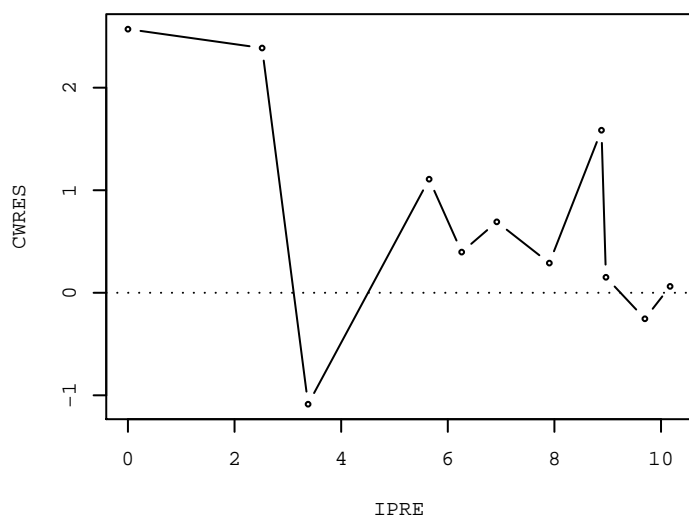
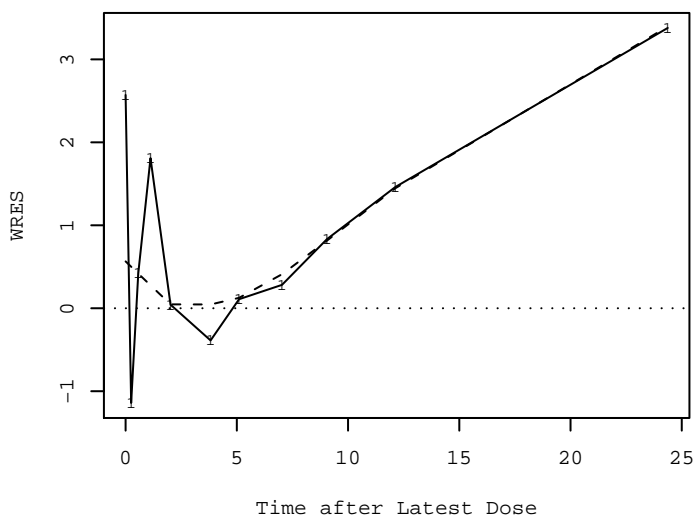
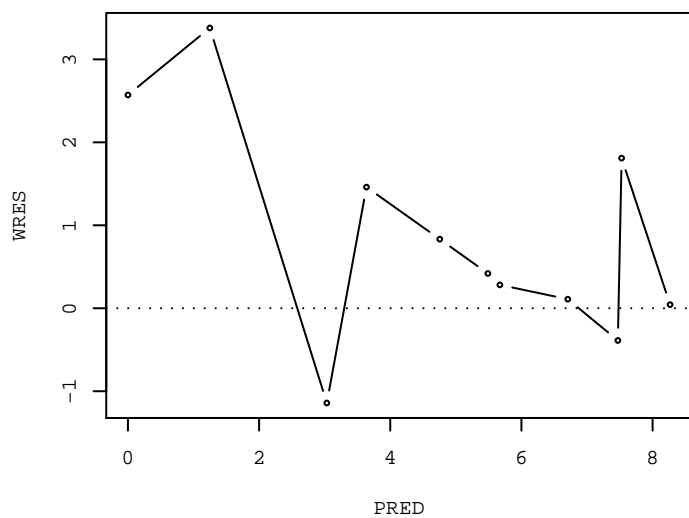
## Extreme CWRE values larger than 2

	ID	TIME	DV	PRED	IPRE	WRES	CWRE	IWRE
2	1	0.00	0.74	0.0000	0.0000	2.5709	2.570873	2.5709
12	1	24.37	3.28	1.2485	2.5167	3.3787	2.386942	1.7475
15	2	0.27	1.72	3.2270	3.9403	-3.6064	-3.054944	-3.7671
16	2	0.52	7.91	5.1854	5.9789	2.8579	2.819601	2.3216
39	4	0.35	1.89	3.9433	3.1280	-2.0454	-2.706425	-2.4783
51	5	0.30	2.02	3.5066	3.8217	-2.9059	-2.842478	-3.1283
53	5	1.00	11.40	7.2409	8.0076	3.5652	3.330559	3.1291
63	6	0.27	1.29	3.2270	1.8796	-1.4095	-2.057880	-1.5590
75	7	0.25	0.85	3.0329	1.4185	-1.1205	-2.154174	-1.6612
88	8	0.52	3.05	5.1854	4.6057	-2.0522	-2.330698	-2.3340
135	12	0.25	1.25	3.0329	2.2658	-1.7703	-2.789100	-2.4614

# Extreme IWRE values larger than 2

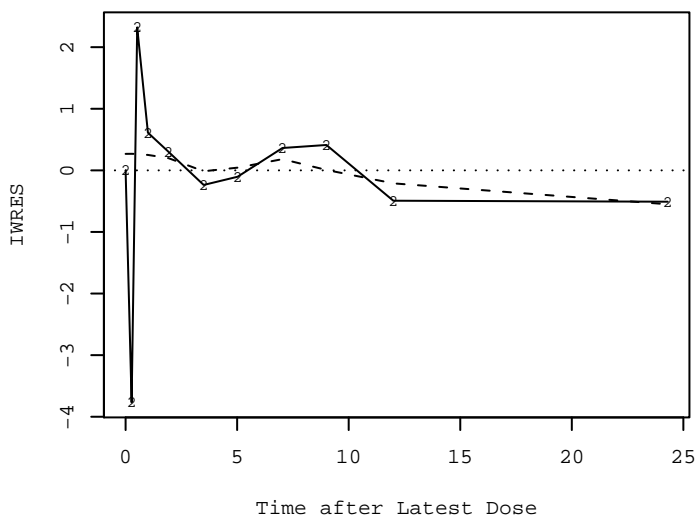
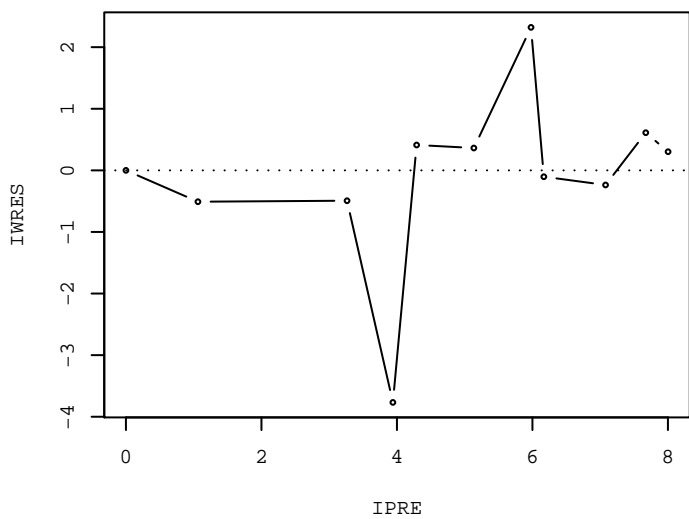
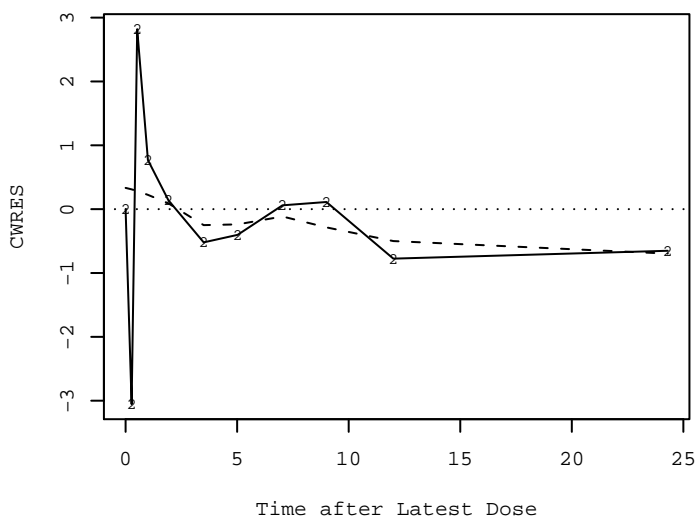
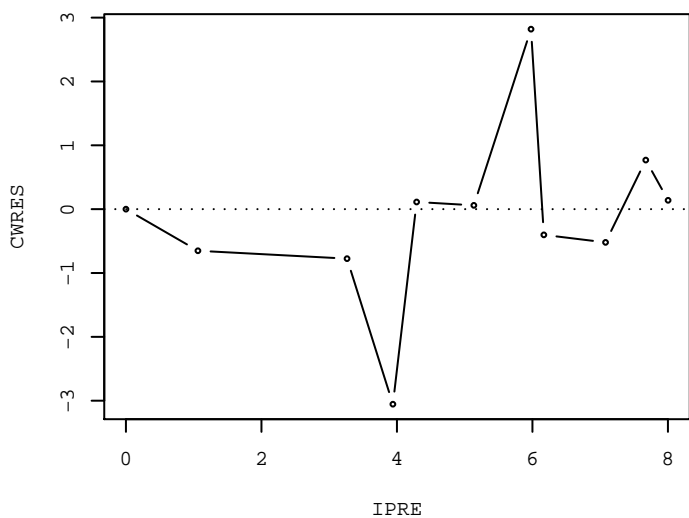
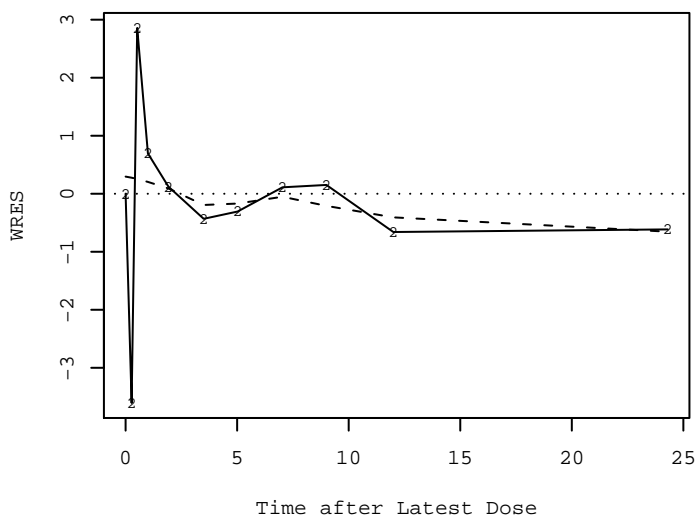
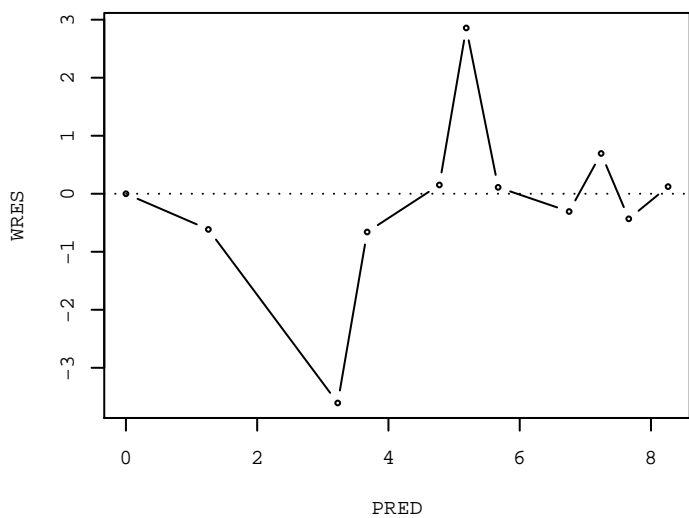
	ID	TIME	DV	PRED	IPRE	WRES	CWRE	IWRE
2	1	0.00	0.74	0.0000	0.0000	2.5709	2.570873	2.5709
15	2	0.27	1.72	3.2270	3.9403	-3.6064	-3.054944	-3.7671
16	2	0.52	7.91	5.1854	5.9789	2.8579	2.819601	2.3216
39	4	0.35	1.89	3.9433	3.1280	-2.0454	-2.706425	-2.4783
41	4	1.07	8.60	7.4162	6.5871	1.6682	1.904480	2.2200
51	5	0.30	2.02	3.5066	3.8217	-2.9059	-2.842478	-3.1283
53	5	1.00	11.40	7.2409	8.0076	3.5652	3.330559	3.1291
88	8	0.52	3.05	5.1854	4.6057	-2.0522	-2.330698	-2.3340
135	12	0.25	1.25	3.0329	2.2658	-1.7703	-2.789100	-2.4614

Individual Residual Curve, ID = 1  
 IOFV = 19.7121 , OFV per DV = 1.792 , Run Test(CWRES) p = 0.509



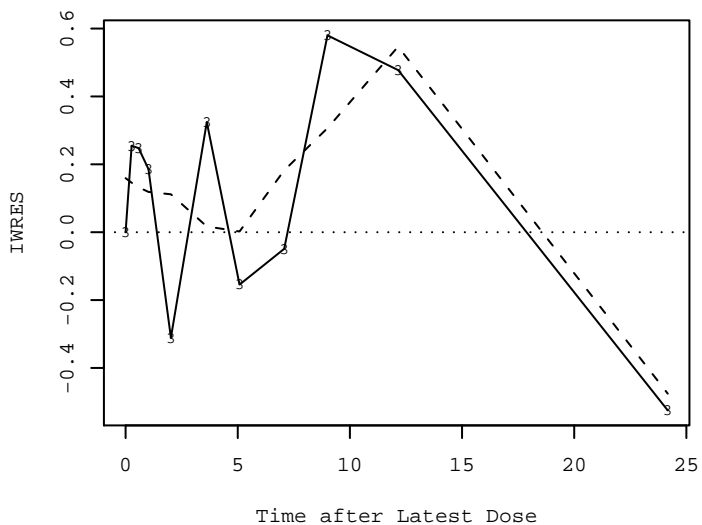
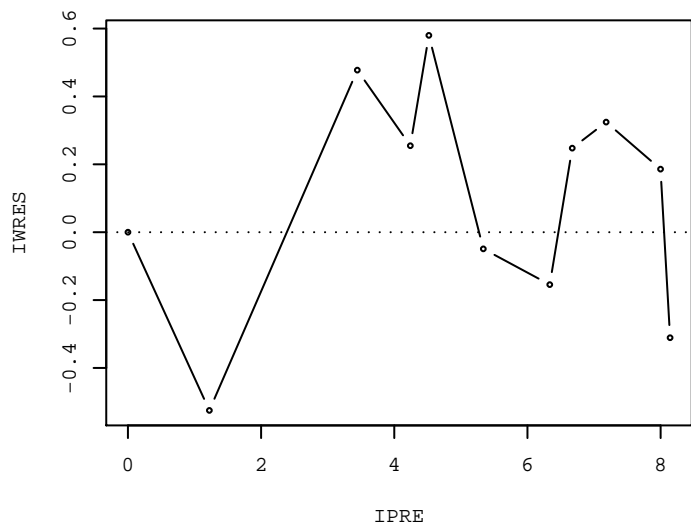
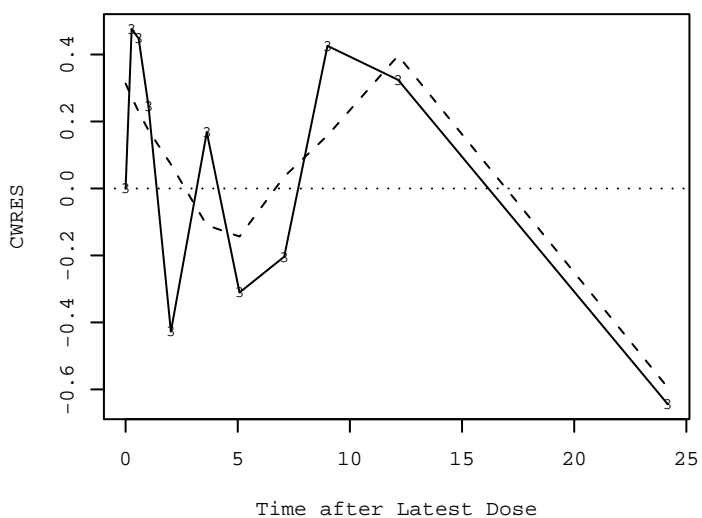
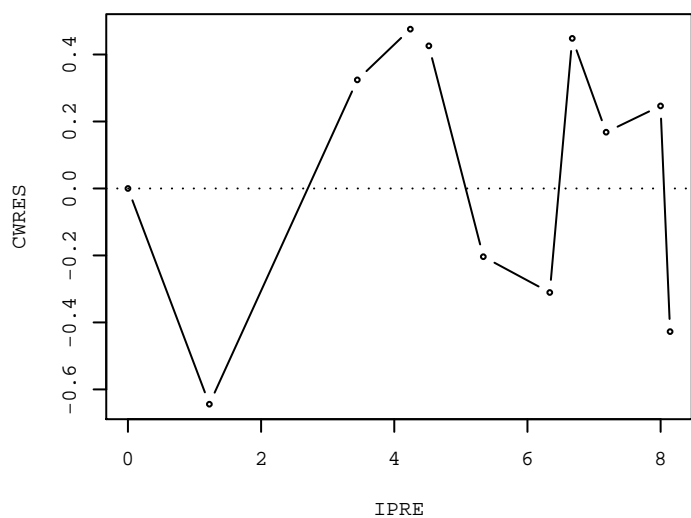
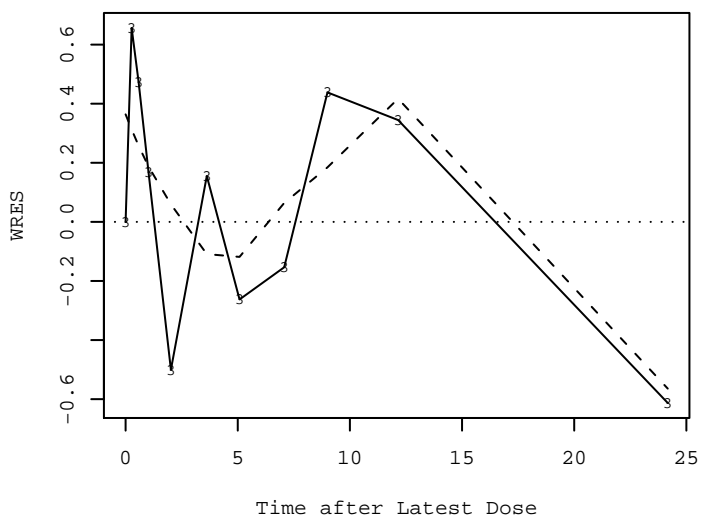
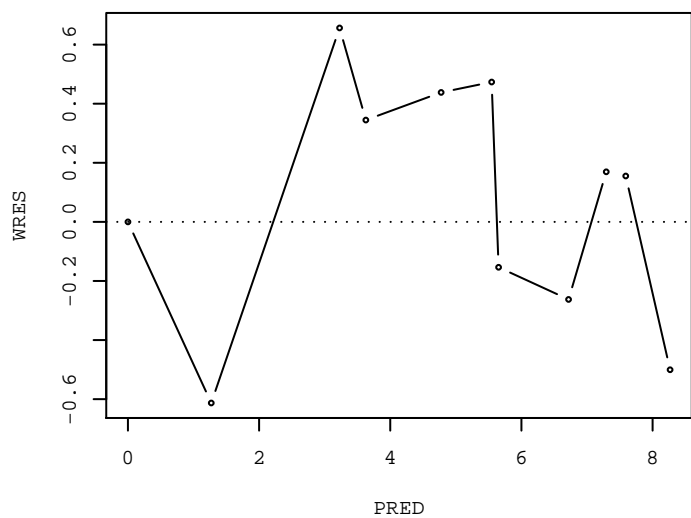
\*Fractional number means dosing occasion.

Individual Residual Curve, ID = 2  
 IOFV = 17.7584 , OFV per DV = 1.6144 , Run Test(CWRES) p = 0.738



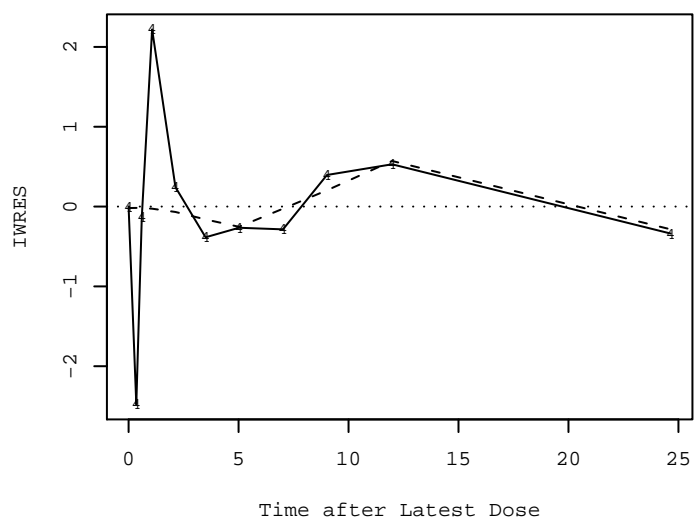
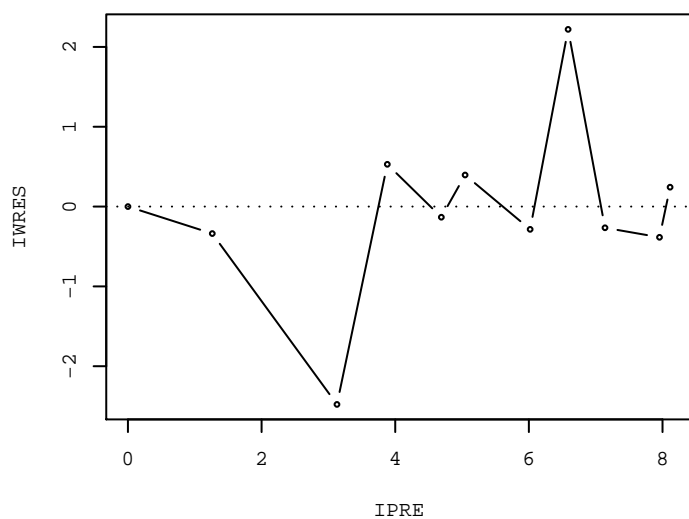
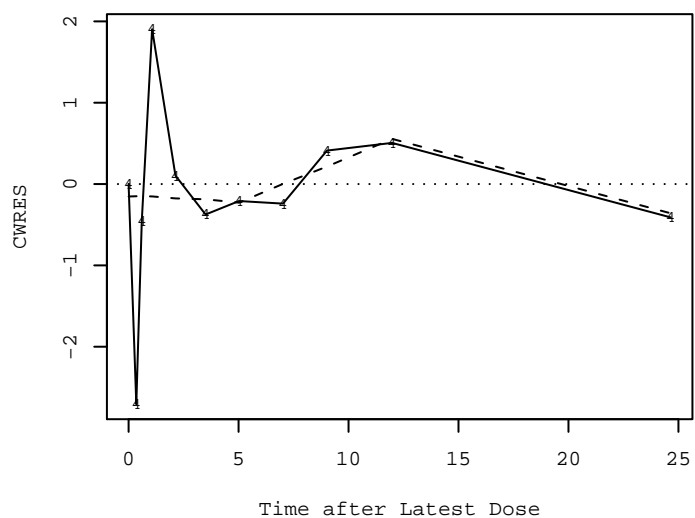
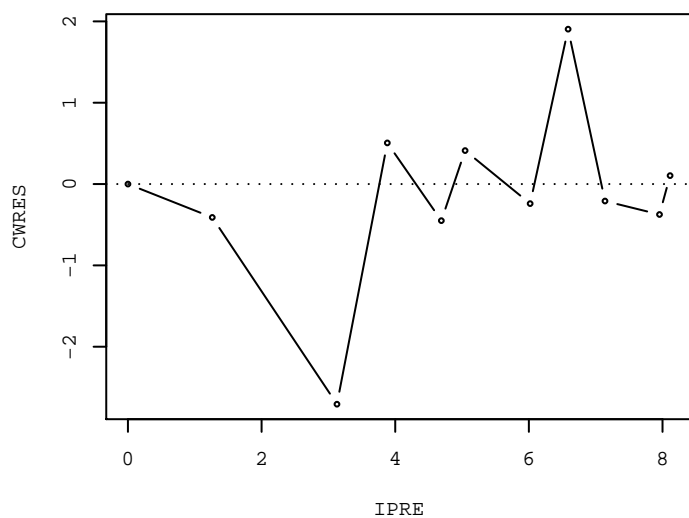
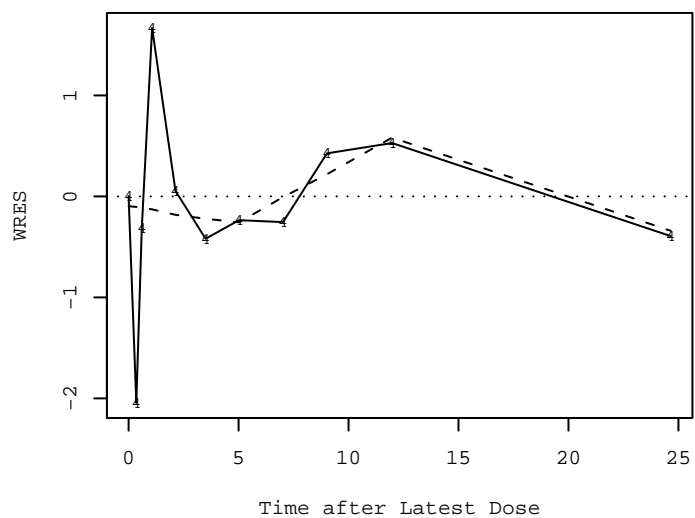
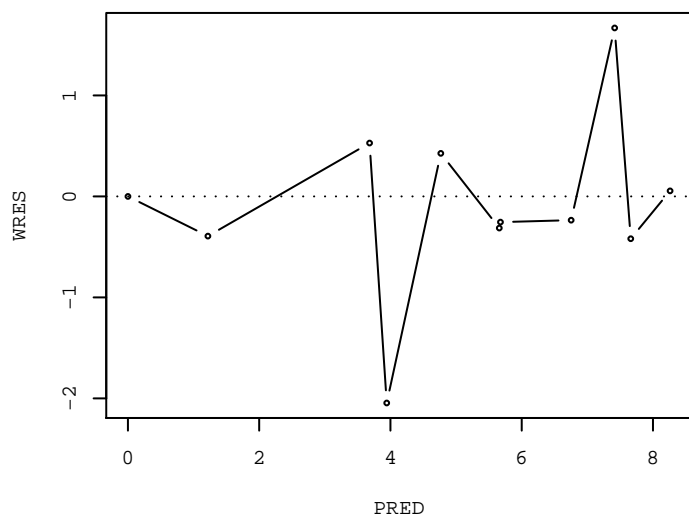
\*Fractional number means dosing occasion.

Individual Residual Curve, ID = 3  
 IOFV = -1.31058 , OFV per DV = -0.11914 , Run Test(CWRES) p = 0.667



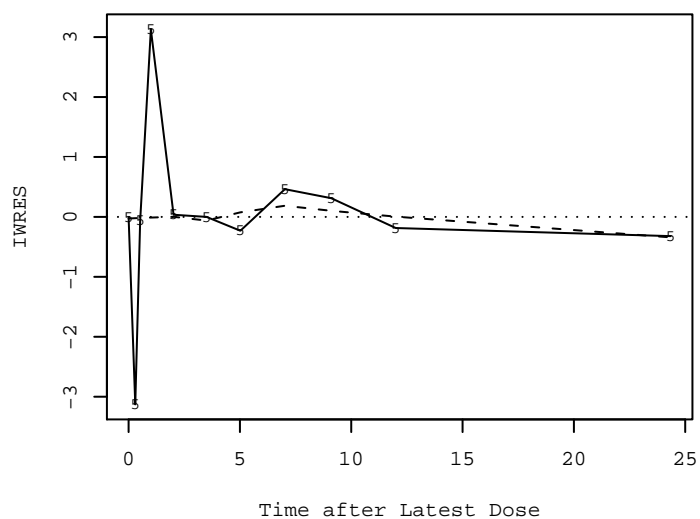
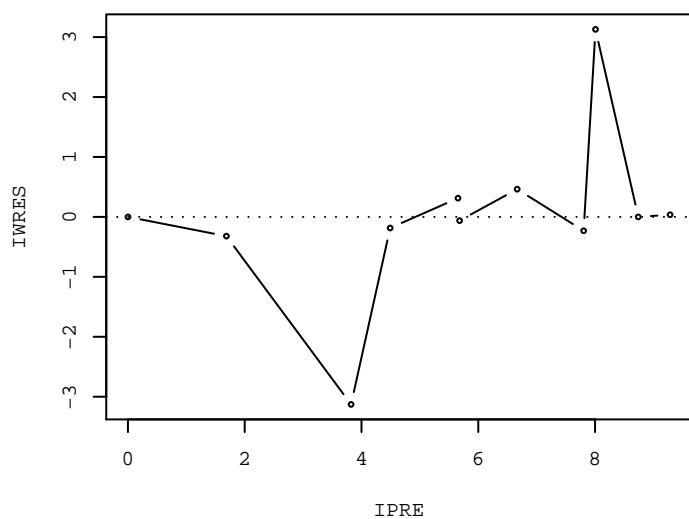
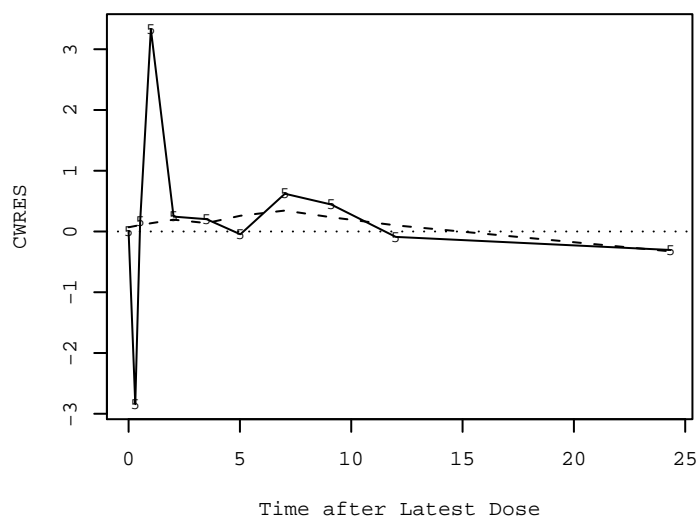
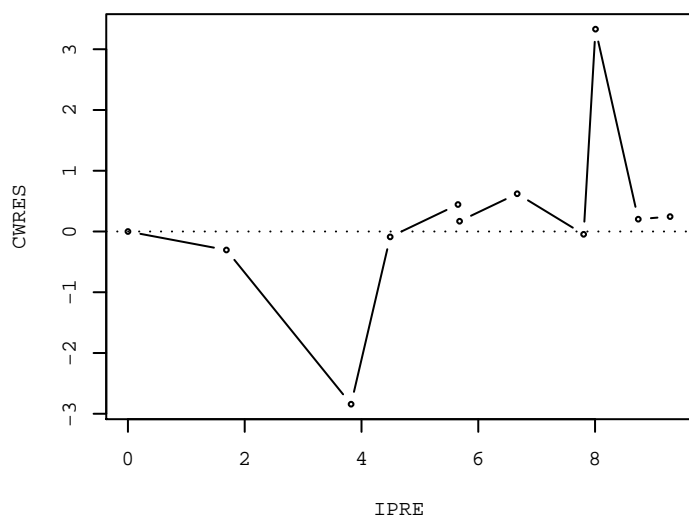
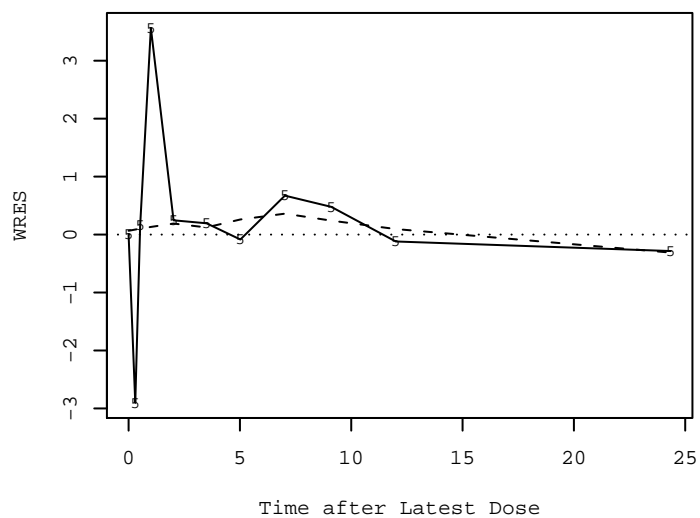
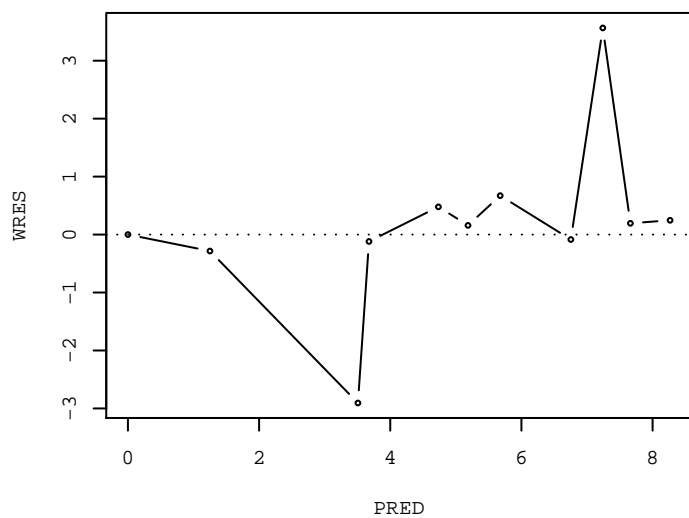
\*Fractional number means dosing occasion.

Individual Residual Curve, ID = 4  
 IOFV = 9.40414 , OFV per DV = 0.85492 , Run Test(CWRES) p = 0.738



\*Fractional number means dosing occasion.

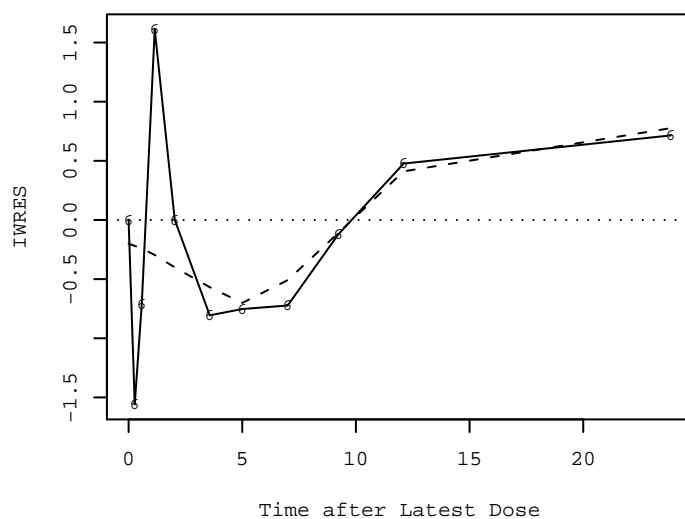
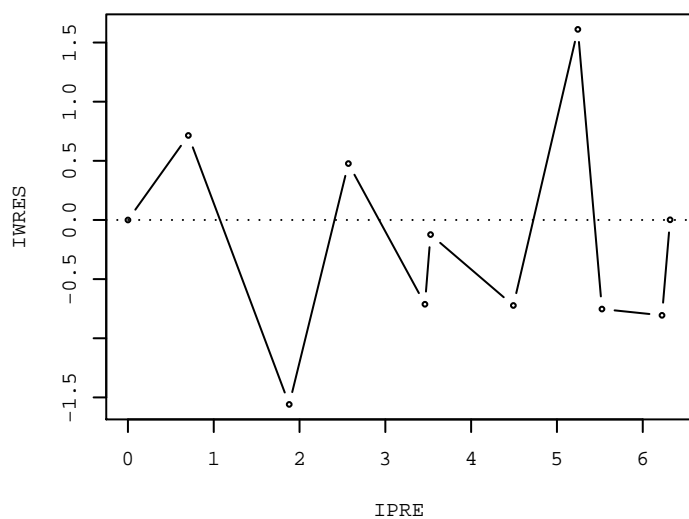
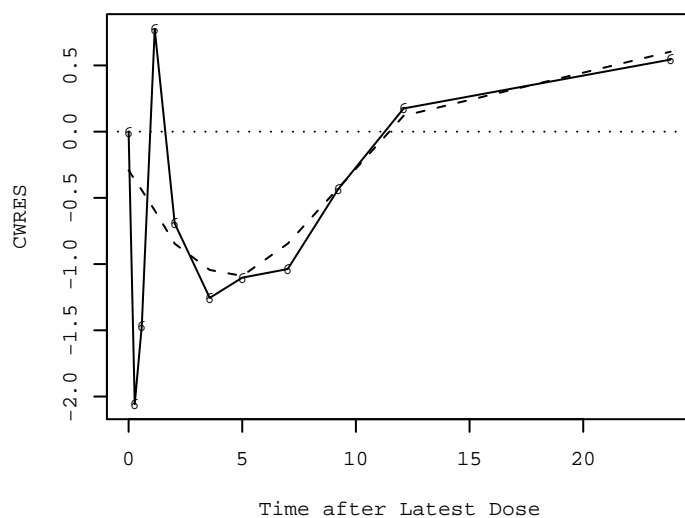
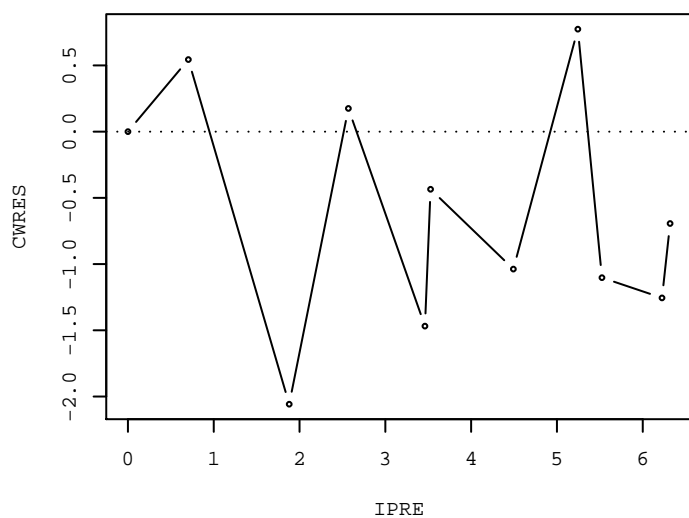
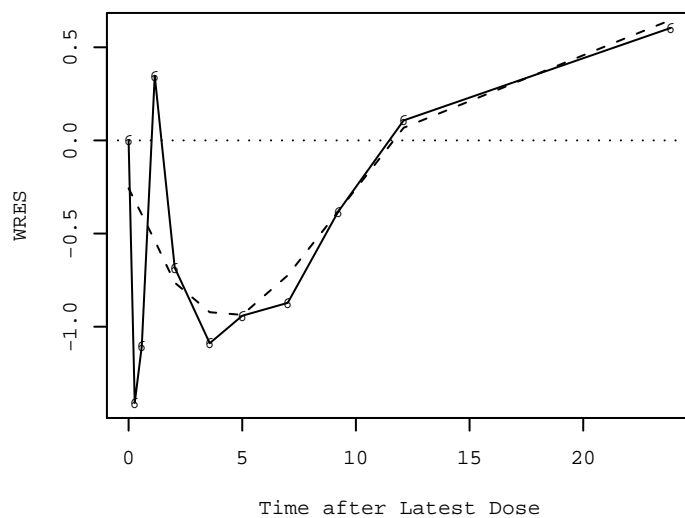
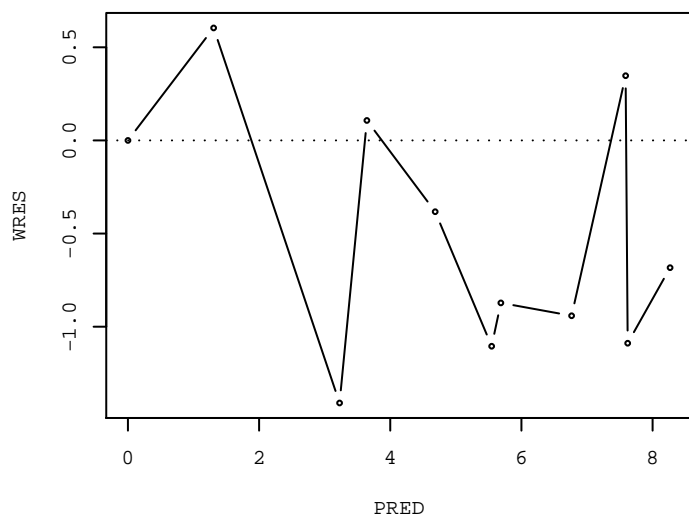
Individual Residual Curve, ID = 5  
 IOFV = 20.4722 , OFV per DV = 1.8611 , Run Test(CWRES) p = 0.667



\*Fractional number means dosing occasion.

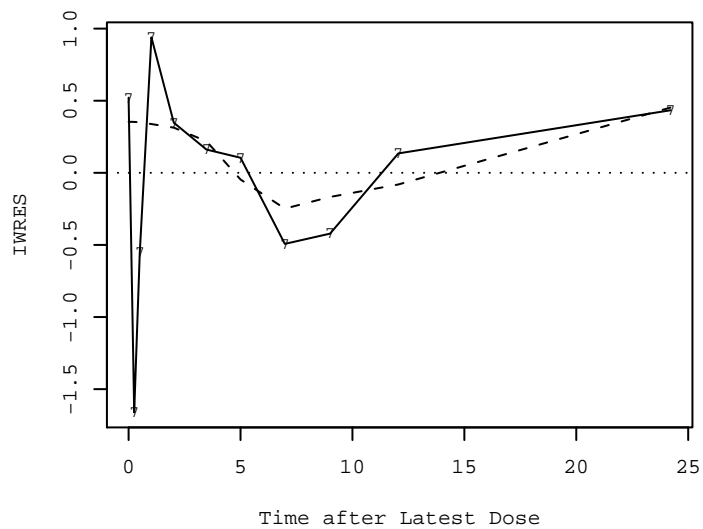
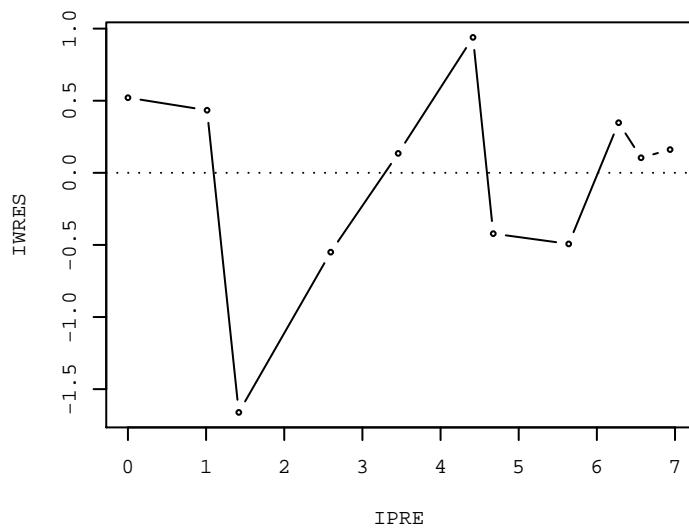
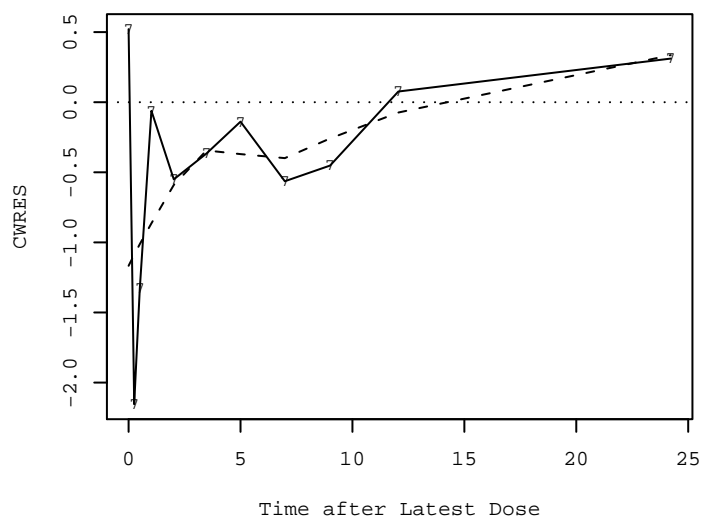
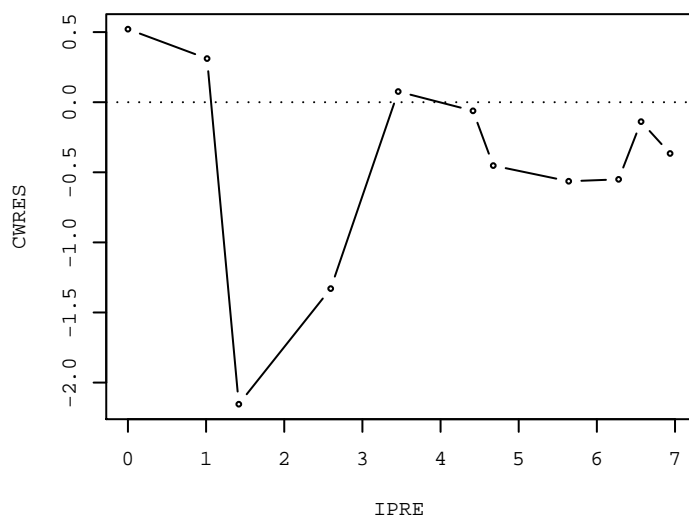
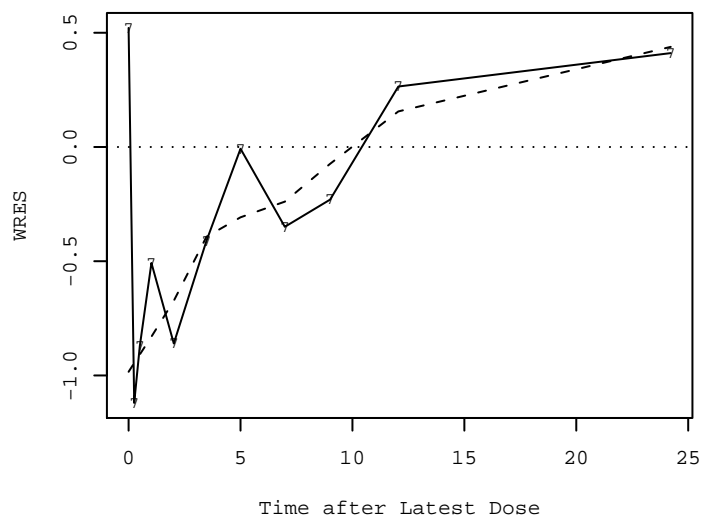
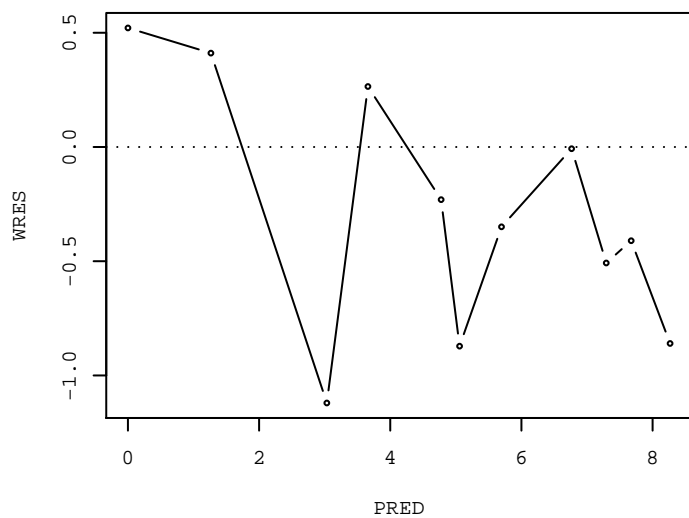


Individual Residual Curve, ID = 6  
 IOFV = 4.25298 , OFV per DV = 0.38663 , Run Test(CWRES) p = 0.333



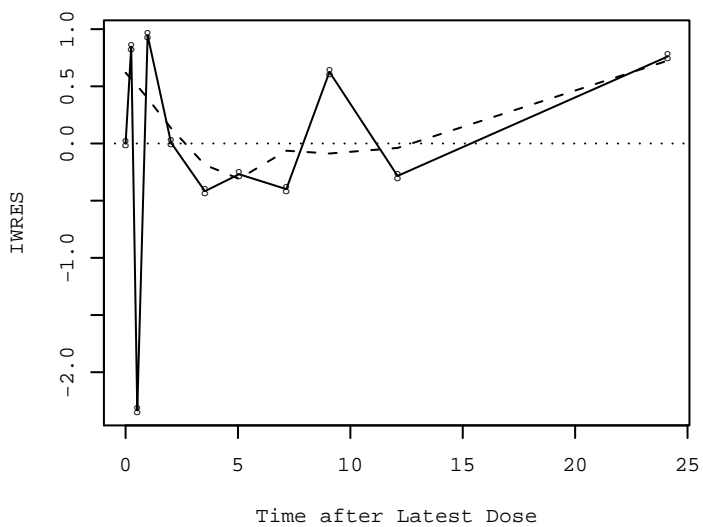
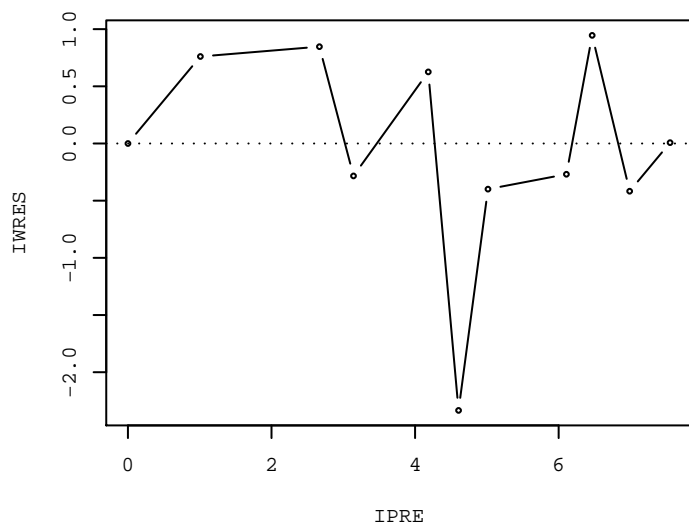
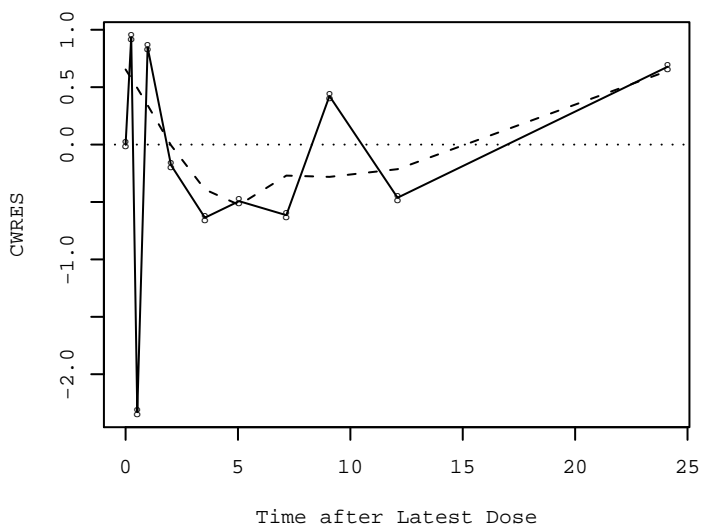
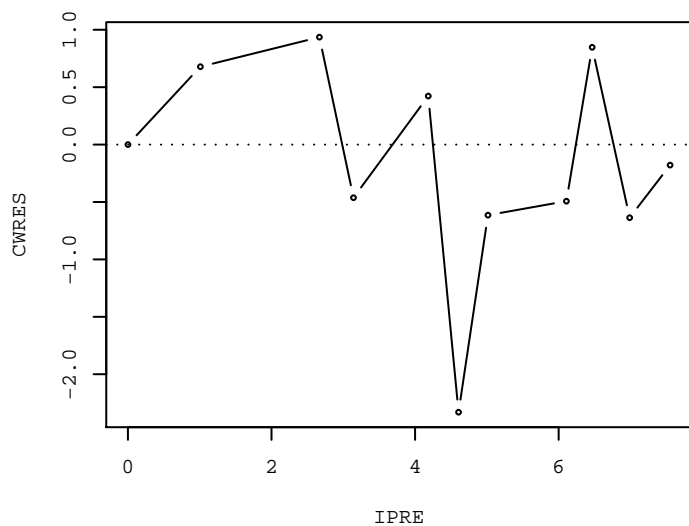
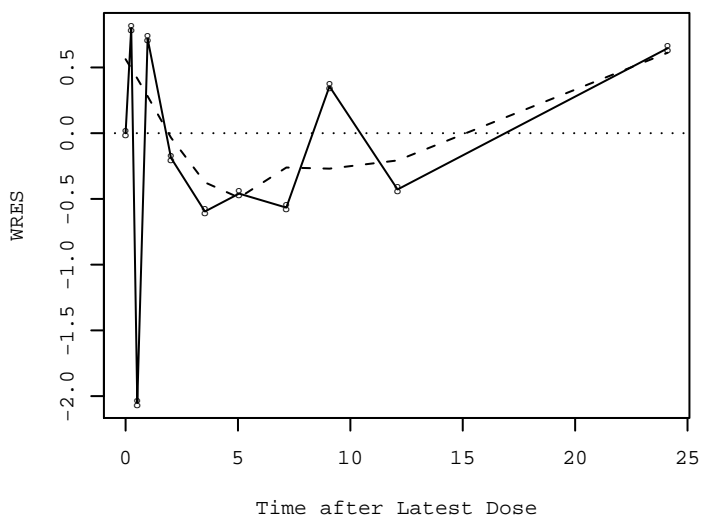
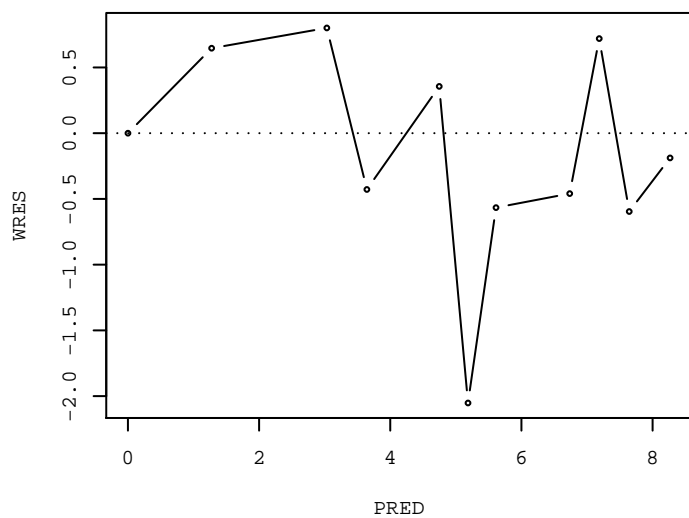
\*Fractional number means dosing occasion.

Individual Residual Curve, ID = 7  
 IOFV = 1.28831 , OFV per DV = 0.11712 , Run Test(CWRES) p = 0.0667



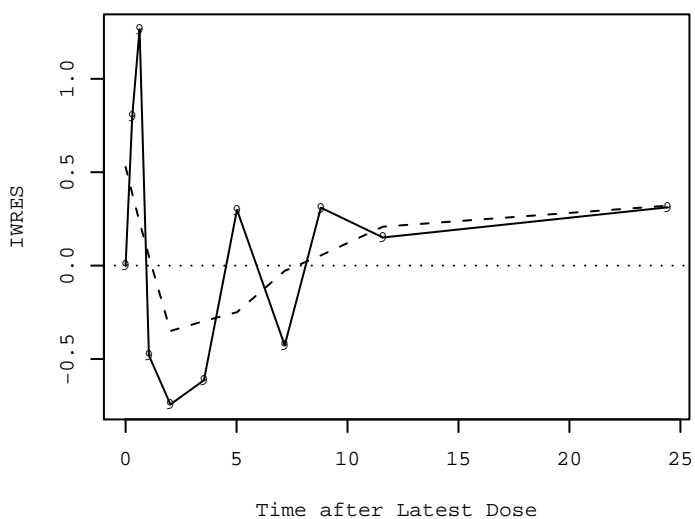
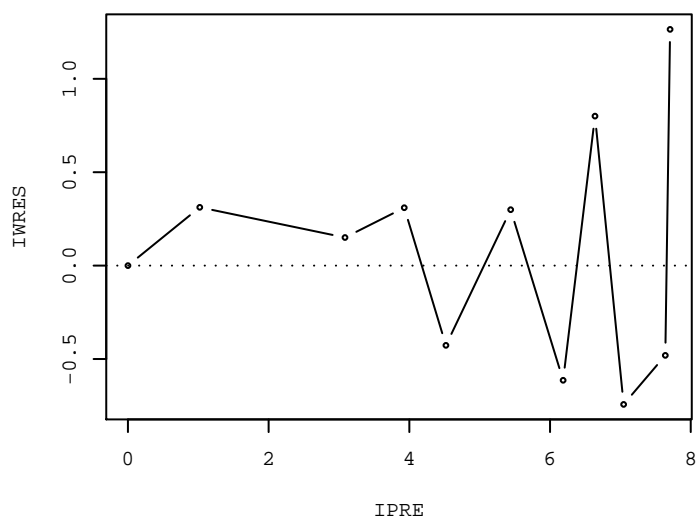
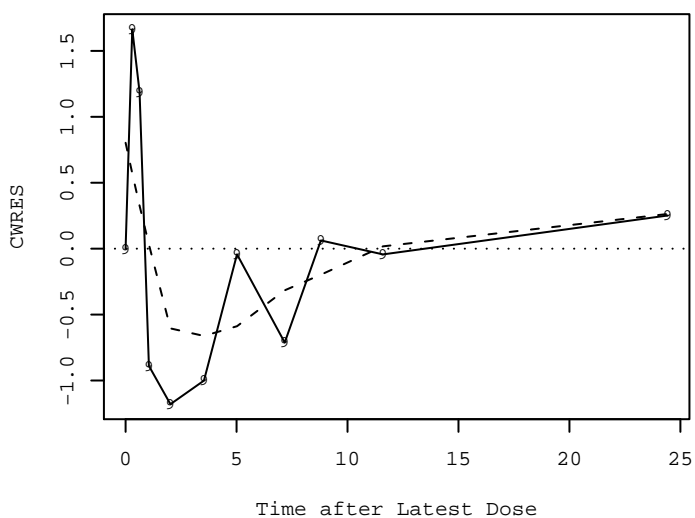
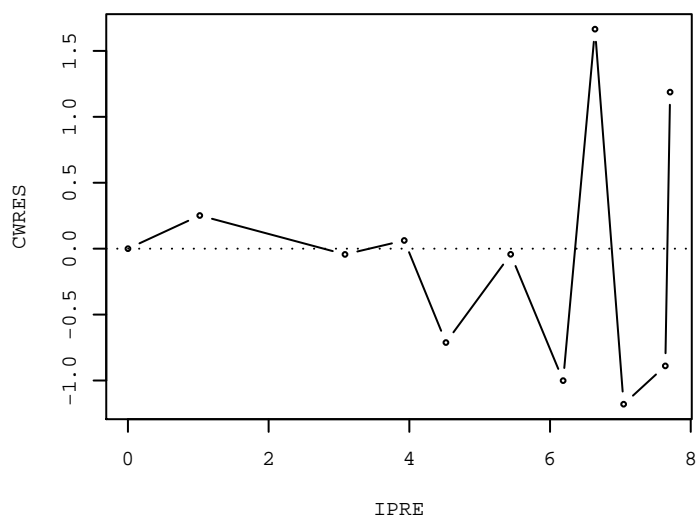
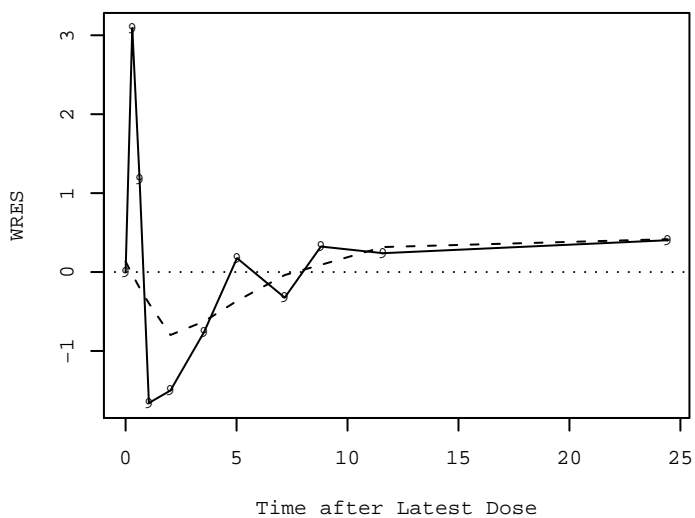
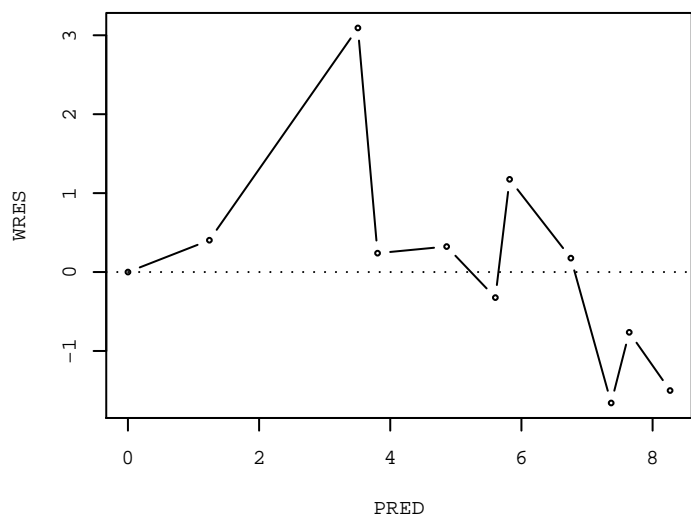
\*Fractional number means dosing occasion.

Individual Residual Curve, ID = 8  
 IOFV = 4.0861 , OFV per DV = 0.37146 , Run Test(CWRES) p = 0.478



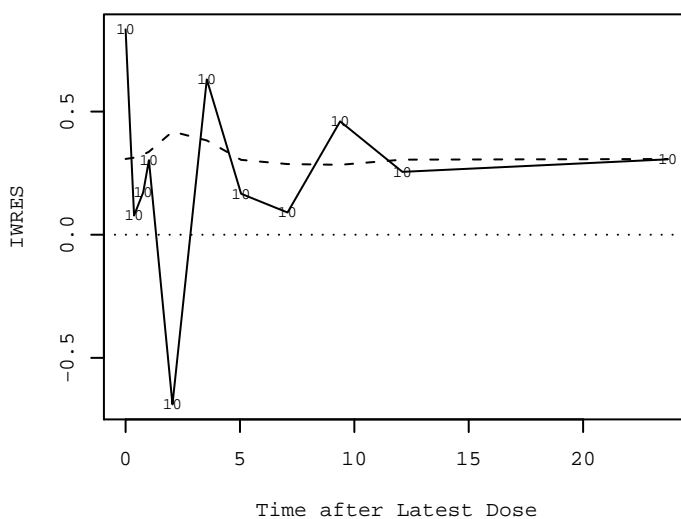
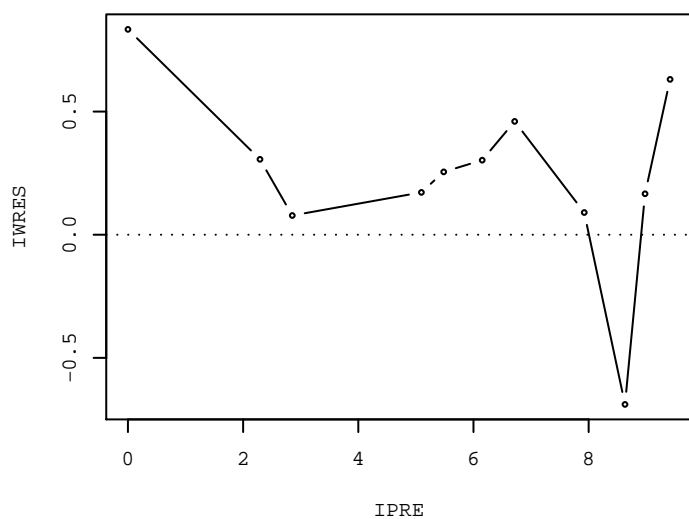
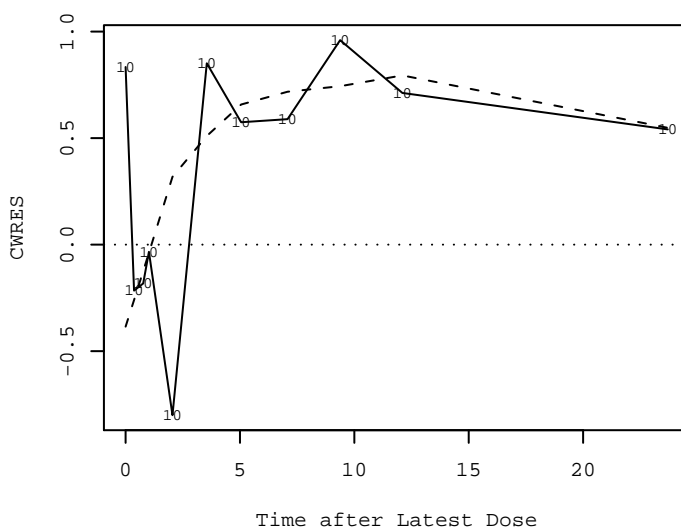
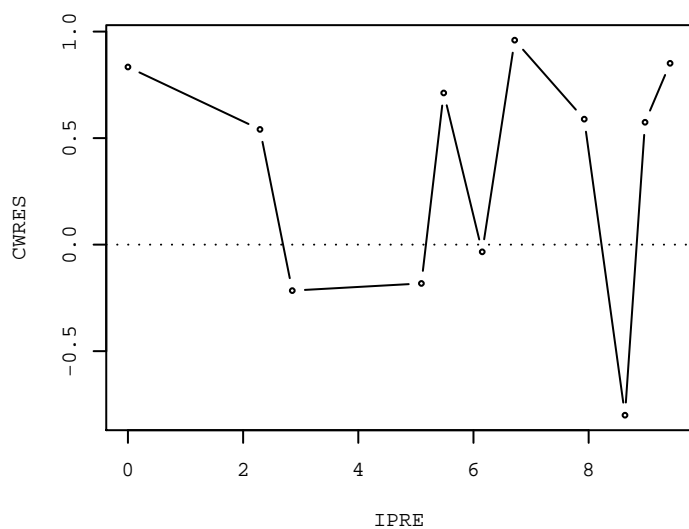
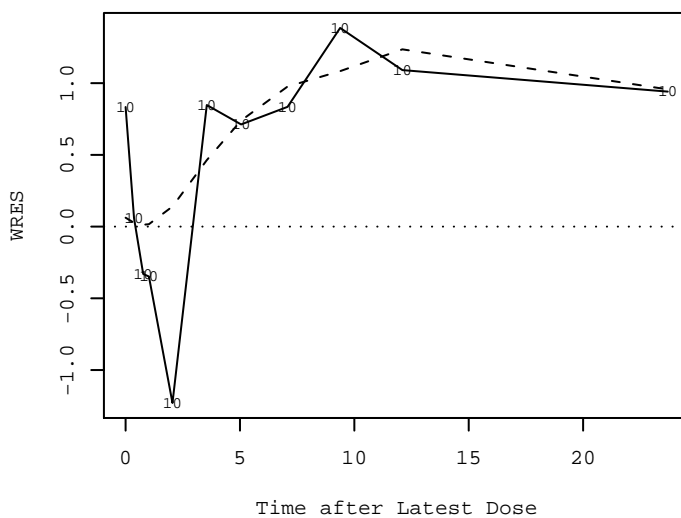
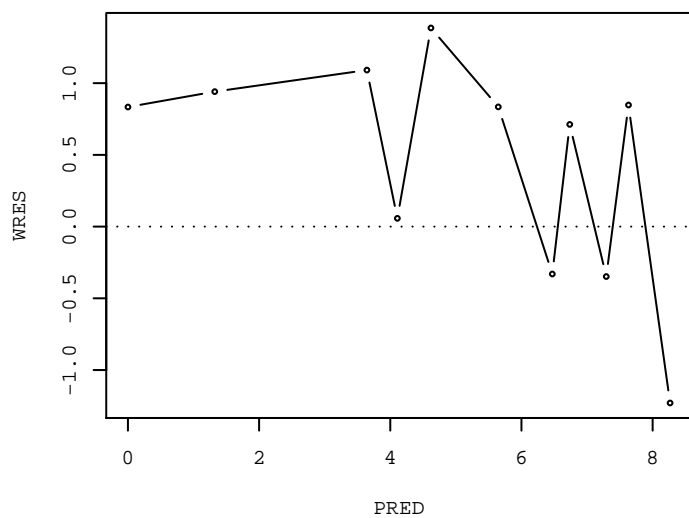
\*Fractional number means dosing occasion.

Individual Residual Curve, ID = 9  
 IOFV = 3.1147 , OFV per DV = 0.28315 , Run Test(CWRES) p = 0.262



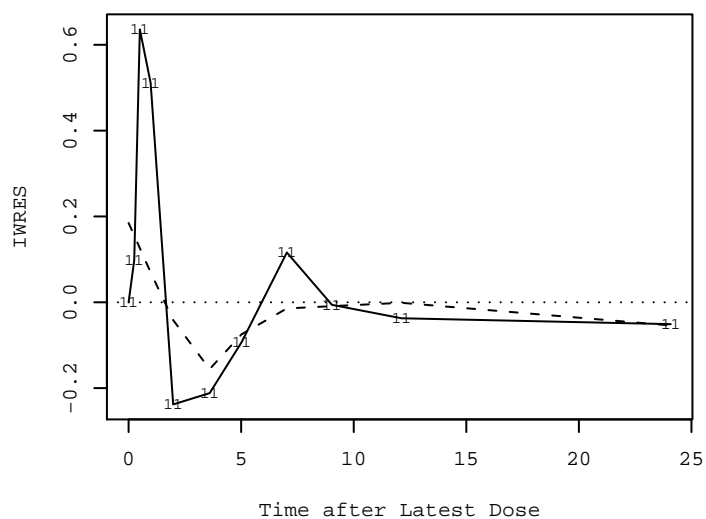
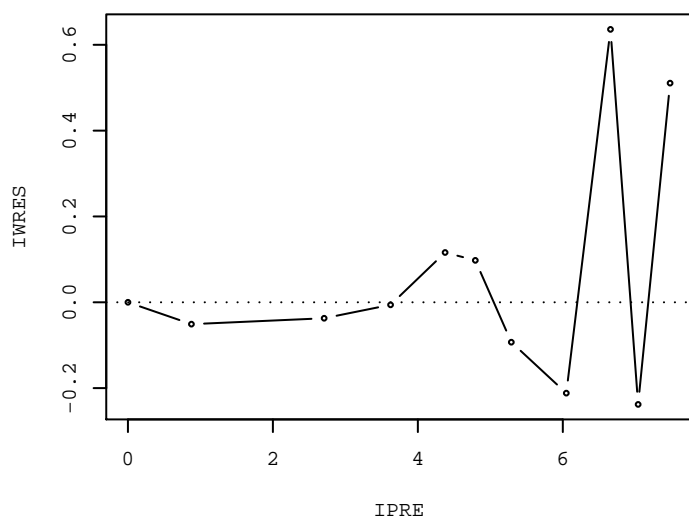
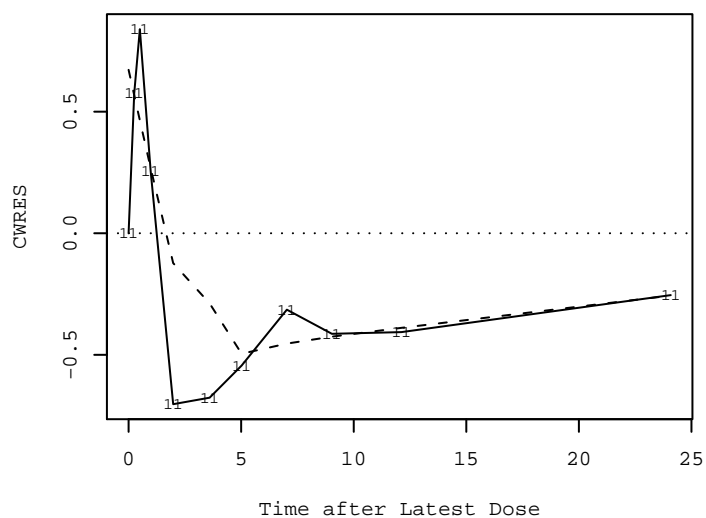
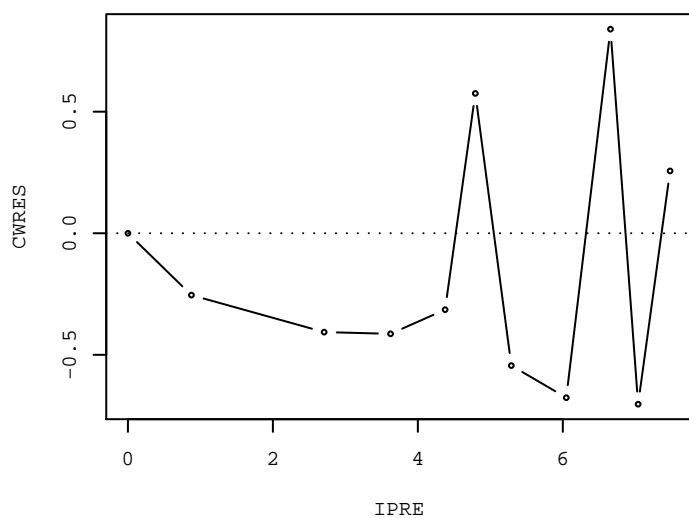
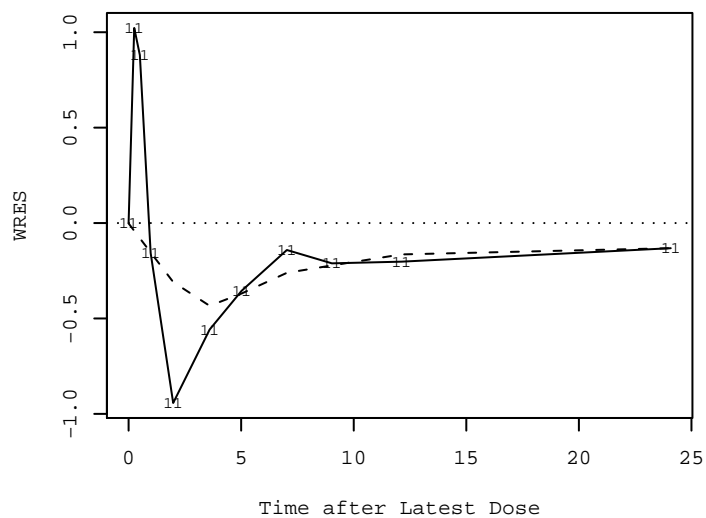
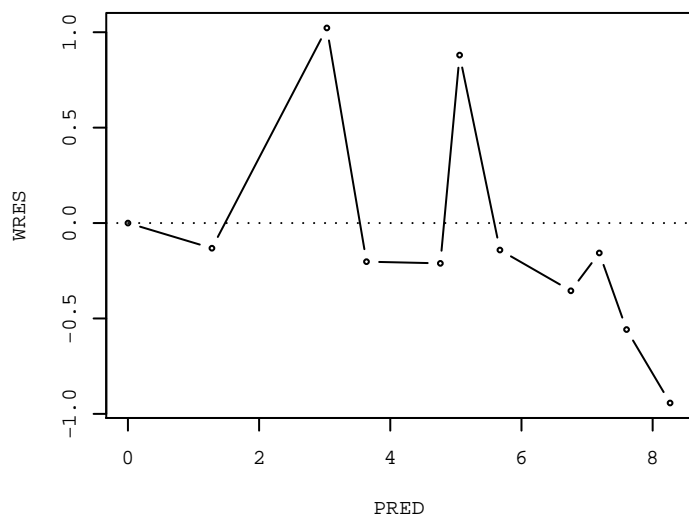
\*Fractional number means dosing occasion.

Individual Residual Curve, ID = 10  
 IOFV = 4.75473 , OFV per DV = 0.43225 , Run Test(CWRES) p = 0.0333



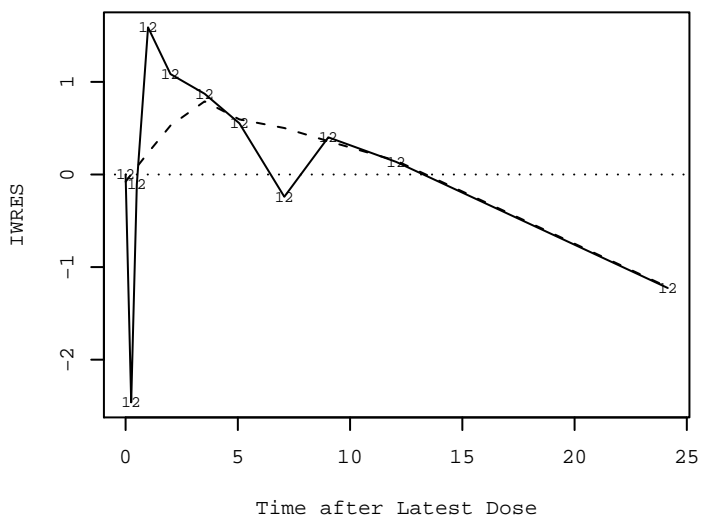
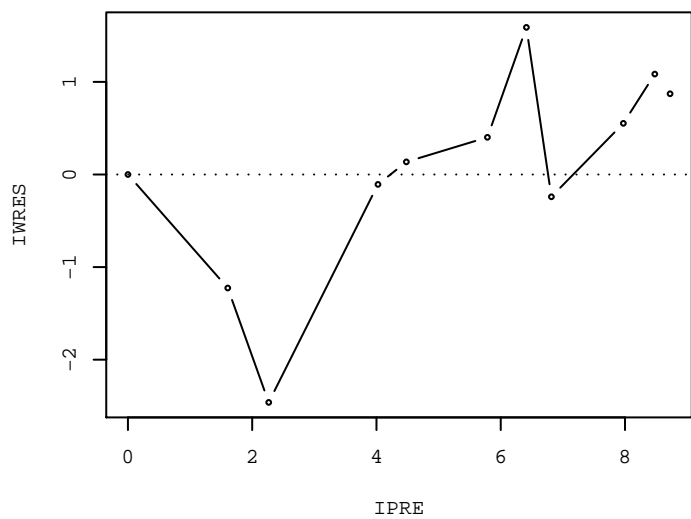
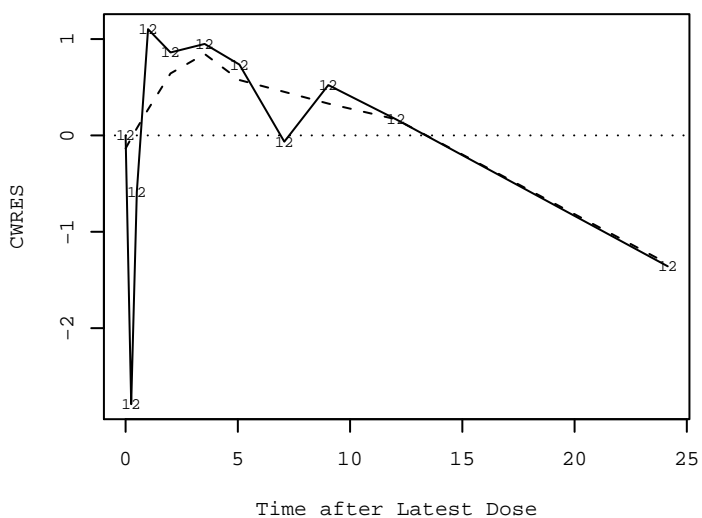
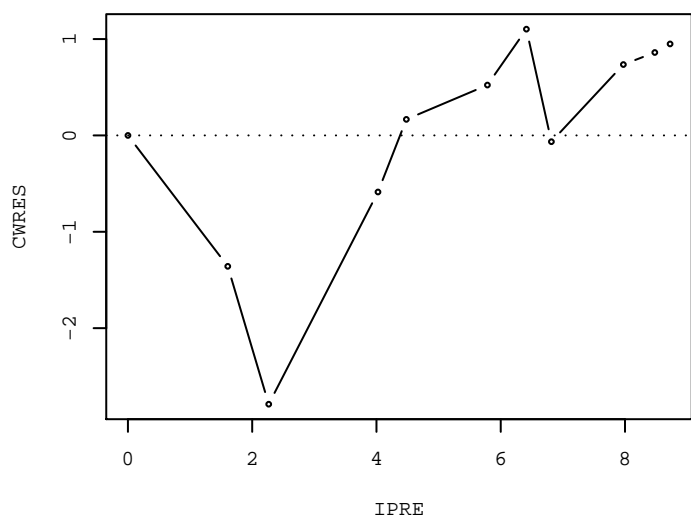
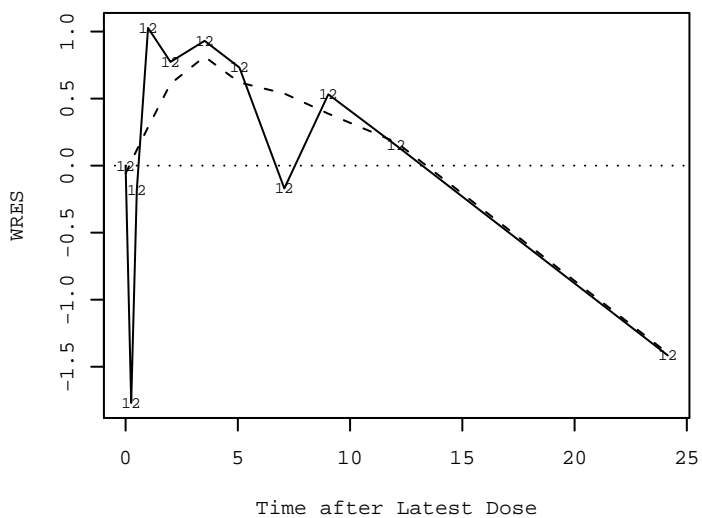
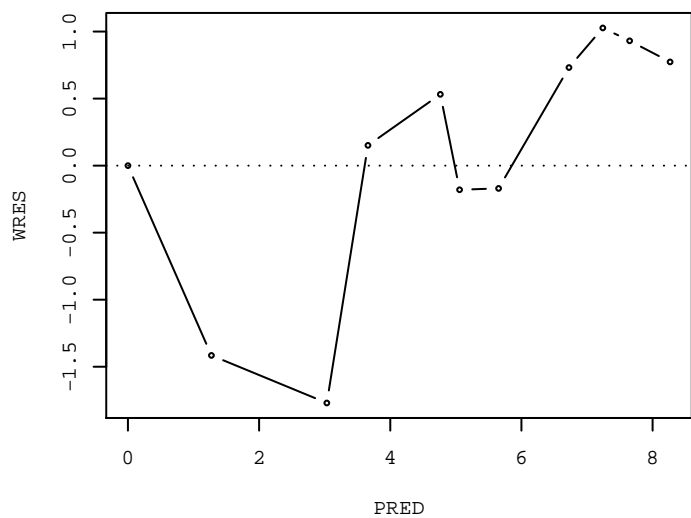
\*Fractional number means dosing occasion.

Individual Residual Curve, ID = 11  
IOFV = -2.36974 , OFV per DV = -0.21543 , Run Test(CWRES) p = 0.00606



\*Fractional number means dosing occasion.

Individual Residual Curve, ID = 12  
 IOFV = 11.6675 , OFV per DV = 1.0607 , Run Test(CWRES) p = 0.667



\*Fractional number means dosing occasion.

Subjects with Bad Run Test Result on CWRES

	ID	p.value
[1,]	10	0.033333333
[2,]	11	0.006060606