EXEMPLE :REGRESSION LOGISTIQUE SIMPLE

Etude d'une pathologie concernant les artères coronaires en fonction de l'âge.

Ces données sont proposées par Hosmer et Lemeshow
Nous présentons le programme utilisant la procédure LOGISTIC de SAS et les résultats obtenus.

```
Data DONN1;
input ID $ AGRP AGE CHD;
cards;
1       1       20      0
2       1       23      0
3       1       24      0
4       1       25      0
5       1       25      1
6       1       26      0
7       1       26      0
8       1       28      0
.
.
.
93      8       61      1
94      8       62      1
95      8       62      1
96      8       63      1
97      8       64      0
98      8       64      1
99      8       65      1
100     8       69      1
;
proc logistic  data= donn1 descending;
model chd=age/ link=logit covb corrb influence iplot scale= none aggregate;
output out = a predicted=pcalcule lower=inf95 upper=sup95;
run;

proc print data=a;
run;

proc plot data=a;
        plot (pcalcule inf95 sup95)*age / overlay;
run;
```

Procédure LOGISTIC

Model Information

Table	WORK.DONN1
Variable de réponse	CHD
Nombre de niveaux de réponse	2
Modèle	logit binaire
Technique d'optimisation	Score de Fisher

Nombre d'observations lues	100
Nombre d'observations utilisées	100

Response Profile

Ordered Value	CHD	Total Frequency
1	1	43
2	0	57

La probabilité modélisée est CHD=1.

Model Convergence Status

Critère de convergence (GCONV=1E-8) respecté.

Model Fit Statistics

Criterion	Intercept Only	Constante et Covariables
AIC	138.663	111.353
SC	141.268	116.563
-2 Log	136.663	107.353

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DDL	Pr > Khi-2
Rapport de vrais	29.3099	1	<.0001
Score	26.3989	1	<.0001
Wald	21.2541	1	<.0001

Analysis of Maximum Likelihood Estimates

Parameter	DDL	Estimate	Standard Error	Wald Chi-Square	Pr > Khi-2
Intercept	1	-5.3095	1.1337	21.9350	<.0001
AGE	1	0.1109	0.0241	21.2541	<.0001

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits	
AGE	1.117	1.066	1.171

Association of Predicted Probabilities and Observed Responses

Pourcentage concordant	79.0	**D de Somers**	0.600
Pourcentage discordant	19.0	**Gamma**	0.612
Pourcentage lié	2.0	**Tau-a**	0.297
Paires	2451	**c**	0.800

Matrice de covariance estimée

Parameter	**Intercept**	**AGE**
Intercept	1.285173	-0.02668
AGE	-0.02668	0.000579

Matrice de corrélation estimée

Parameter	**Intercept**	**AGE**
Intercept	1.0000	-0.9781
AGE	-0.9781	1.0000

Regression Diagnostics

Case Number	Covariates AGE	Pearson Residual	Deviance Residual	Hat Matrix Diagonal	Intercept DfBeta	AGE DfBeta	Confidence Interval Displacement C	Confidence Interval Displacement CBar	Delta Deviance	Delta Chi-Square
1	20.0000	-0.2132	-0.2982	0.0187	-0.0294	0.0278	0.000883	0.000866	0.0898	0.0463
2	23.0000	-0.2518	-0.3506	0.0204	-0.0361	0.0338	0.00135	0.00132	0.1243	0.0647
3	24.0000	-0.2662	-0.3700	0.0209	-0.0384	0.0359	0.00154	0.00151	0.1384	0.0724
4	25.0000	-0.2813	-0.3903	0.0213	-0.0409	0.0380	0.00176	0.00172	0.1541	0.0809
5	25.0000	3.5545	2.2859	0.0213	0.5163	-0.4803	0.2807	0.2747	5.4999	12.9091
6	26.0000	-0.2974	-0.4117	0.0216	-0.0433	0.0401	0.00199	0.00195	0.1714	0.0904
7	26.0000	-0.2974	-0.4117	0.0216	-0.0433	0.0401	0.00199	0.00195	0.1714	0.0904
8	28.0000	-0.3323	-0.4576	0.0219	-0.0483	0.0442	0.00253	0.00248	0.2119	0.1129
9	28.0000	-0.3323	-0.4576	0.0219	-0.0483	0.0442	0.00253	0.00248	0.2119	0.1129
10	29.0000	-0.3512	-0.4823	0.0220	-0.0507	0.0461	0.00283	0.00277	0.2354	0.1261
11	30.0000	-0.3712	-0.5082	0.0219	-0.0530	0.0479	0.00315	0.00308	0.2613	0.1409
12	30.0000	-0.3712	-0.5082	0.0219	-0.0530	0.0479	0.00315	0.00308	0.2613	0.1409
13	30.0000	-0.3712	-0.5082	0.0219	-0.0530	0.0479	0.00315	0.00308	0.2613	0.1409
14	30.0000	-0.3712	-0.5082	0.0219	-0.0530	0.0479	0.00315	0.00308	0.2613	0.1409
15	30.0000	-0.3712	-0.5082	0.0219	-0.0530	0.0479	0.00315	0.00308	0.2613	0.1409
16	30.0000	2.6937	2.0547	0.0219	0.3843	-0.3477	0.1659	0.1623	4.3842	7.4182

Regression Diagnostics

Case Number	Covariates AGE	Pearson Residual	Deviance Residual	Hat Matrix Diagonal	Intercept DfBeta	AGE DfBeta	Confidence Interval Displacement C	Confidence Interval Displacement CBar	Delta Deviance	Delta Chi-Square
17	32.0000	-0.4148	-0.5635	0.0214	-0.0571	0.0508	0.00384	0.00376	0.3213	0.1758
18	32.0000	-0.4148	-0.5635	0.0214	-0.0571	0.0508	0.00384	0.00376	0.3213	0.1758
19	33.0000	-0.4384	-0.5930	0.0209	-0.0588	0.0518	0.00420	0.00411	0.3558	0.1963
20	33.0000	-0.4384	-0.5930	0.0209	-0.0588	0.0518	0.00420	0.00411	0.3558	0.1963
21	34.0000	-0.4634	-0.6238	0.0204	-0.0602	0.0525	0.00457	0.00448	0.3936	0.2193
22	34.0000	-0.4634	-0.6238	0.0204	-0.0602	0.0525	0.00457	0.00448	0.3936	0.2193
23	34.0000	2.1578	1.8616	0.0204	0.2803	-0.2443	0.0991	0.0971	3.5625	4.7530
24	34.0000	-0.4634	-0.6238	0.0204	-0.0602	0.0525	0.00457	0.00448	0.3936	0.2193
25	34.0000	-0.4634	-0.6238	0.0204	-0.0602	0.0525	0.00457	0.00448	0.3936	0.2193
26	35.0000	-0.4899	-0.6559	0.0198	-0.0612	0.0527	0.00495	0.00485	0.4350	0.2448
27	35.0000	-0.4899	-0.6559	0.0198	-0.0612	0.0527	0.00495	0.00485	0.4350	0.2448
28	36.0000	-0.5178	-0.6893	0.0191	-0.0618	0.0523	0.00533	0.00523	0.4803	0.2734
29	36.0000	1.9312	1.7629	0.0191	0.2303	-0.1951	0.0741	0.0727	3.1804	3.8022
30	36.0000	-0.5178	-0.6893	0.0191	-0.0618	0.0523	0.00533	0.00523	0.4803	0.2734
31	37.0000	-0.5473	-0.7239	0.0184	-0.0618	0.0513	0.00571	0.00561	0.5297	0.3052
32	37.0000	1.8270	1.7131	0.0184	0.2061	-0.1713	0.0636	0.0625	2.9973	3.4005
33	37.0000	-0.5473	-0.7239	0.0184	-0.0618	0.0513	0.00571	0.00561	0.5297	0.3052

Regression Diagnostics

Case Number	Covariates AGE	Pearson Residual	Deviance Residual	Hat Matrix Diagonal	Intercept DfBeta	AGE DfBeta	Confidence Interval Displacement C	Confidence Interval Displacement CBar	Delta Deviance	Delta Chi-Square
34	38.0000	-0.5786	-0.7599	0.0176	-0.0611	0.0497	0.00610	0.00599	0.5834	0.3407
35	38.0000	-0.5786	-0.7599	0.0176	-0.0611	0.0497	0.00610	0.00599	0.5834	0.3407
36	39.0000	-0.6115	-0.7971	0.0168	-0.0598	0.0472	0.00650	0.00639	0.6418	0.3804
37	39.0000	1.6352	1.6132	0.0168	0.1598	-0.1262	0.0465	0.0457	2.6482	2.7196
38	40.0000	-0.6464	-0.8356	0.0160	-0.0576	0.0438	0.00693	0.00682	0.7051	0.4247
39	40.0000	1.5470	1.5632	0.0160	0.1379	-0.1049	0.0397	0.0390	2.4825	2.4322
40	41.0000	-0.6833	-0.8754	0.0154	-0.0546	0.0395	0.00739	0.00728	0.7736	0.4742
41	41.0000	-0.6833	-0.8754	0.0154	-0.0546	0.0395	0.00739	0.00728	0.7736	0.4742
42	42.0000	-0.7223	-0.9163	0.0147	-0.0506	0.0342	0.00792	0.00781	0.8474	0.5295
43	42.0000	-0.7223	-0.9163	0.0147	-0.0506	0.0342	0.00792	0.00781	0.8474	0.5295
44	42.0000	-0.7223	-0.9163	0.0147	-0.0506	0.0342	0.00792	0.00781	0.8474	0.5295
45	42.0000	1.3846	1.4633	0.0147	0.0969	-0.0655	0.0291	0.0287	2.1698	1.9457
46	43.0000	-0.7634	-0.9584	0.0143	-0.0455	0.0277	0.00855	0.00843	0.9269	0.5913
47	43.0000	-0.7634	-0.9584	0.0143	-0.0455	0.0277	0.00855	0.00843	0.9269	0.5913
48	43.0000	1.3099	1.4136	0.0143	0.0781	-0.0476	0.0252	0.0248	2.0229	1.7406
49	44.0000	-0.8070	-1.0015	0.0139	-0.0393	0.0201	0.00933	0.00920	1.0122	0.6604
50	44.0000	-0.8070	-1.0015	0.0139	-0.0393	0.0201	0.00933	0.00920	1.0122	0.6604

Regression Diagnostics

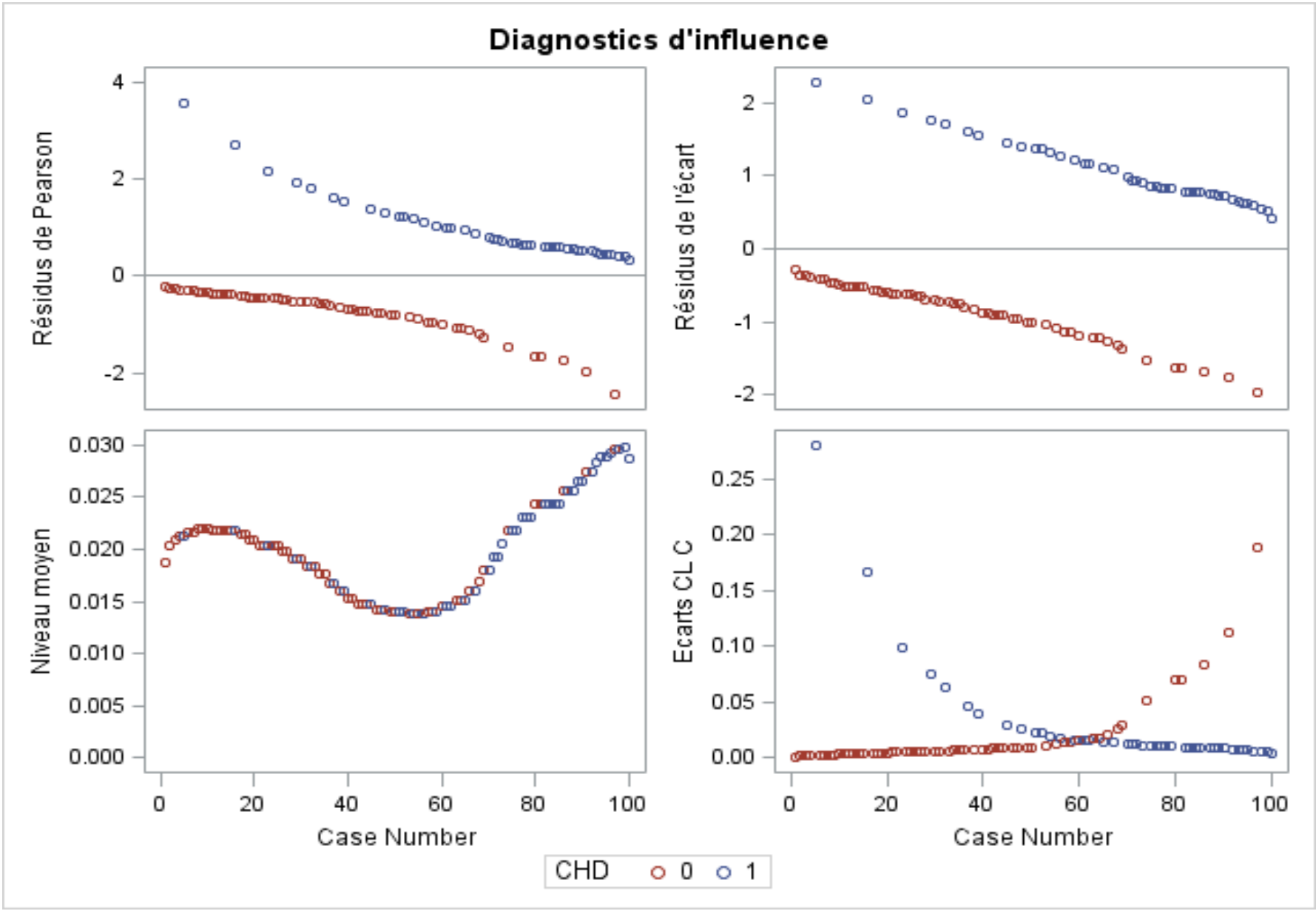
Case Number	Covariates AGE	Pearson Residual	Deviance Residual	Hat Matrix Diagonal	Intercept DfBeta	AGE DfBeta	Confidence Interval Displacement C	Confidence Interval Displacement CBar	Delta Deviance	Delta Chi-Square
51	44.0000	1.2392	1.3641	0.0139	0.0603	-0.0308	0.0220	0.0217	1.8825	1.5573
52	44.0000	1.2392	1.3641	0.0139	0.0603	-0.0308	0.0220	0.0217	1.8825	1.5573
53	45.0000	-0.8530	-1.0457	0.0138	-0.0319	0.0111	0.0103	0.0102	1.1036	0.7378
54	45.0000	1.1723	1.3151	0.0138	0.0439	-0.0153	0.0195	0.0192	1.7487	1.3936
55	46.0000	-0.9016	-1.0908	0.0138	-0.0233	0.000921	0.0115	0.0114	1.2013	0.8243
56	46.0000	1.1091	1.2665	0.0138	0.0286	-0.00113	0.0175	0.0172	1.6213	1.2473
57	47.0000	-0.9531	-1.1369	0.0140	-0.0134	-0.0106	0.0131	0.0129	1.3054	0.9212
58	47.0000	-0.9531	-1.1369	0.0140	-0.0134	-0.0106	0.0131	0.0129	1.3054	0.9212
59	47.0000	1.0493	1.2185	0.0140	0.0147	0.0117	0.0159	0.0157	1.5004	1.1166
60	48.0000	-1.0074	-1.1837	0.0145	-0.00211	-0.0236	0.0151	0.0149	1.4160	1.0298
61	48.0000	0.9926	1.1711	0.0145	0.00208	0.0232	0.0147	0.0145	1.3861	0.9998
62	48.0000	0.9926	1.1711	0.0145	0.00208	0.0232	0.0147	0.0145	1.3861	0.9998
63	49.0000	-1.0649	-1.2312	0.0151	0.0105	-0.0379	0.0177	0.0174	1.5333	1.1513
64	49.0000	-1.0649	-1.2312	0.0151	0.0105	-0.0379	0.0177	0.0174	1.5333	1.1513
65	49.0000	0.9391	1.1245	0.0151	-0.00923	0.0334	0.0137	0.0135	1.2781	0.8954
66	50.0000	-1.1256	-1.2794	0.0159	0.0244	-0.0535	0.0209	0.0205	1.6574	1.2875
67	50.0000	0.8884	1.0787	0.0159	-0.0192	0.0422	0.0130	0.0128	1.1764	0.8021

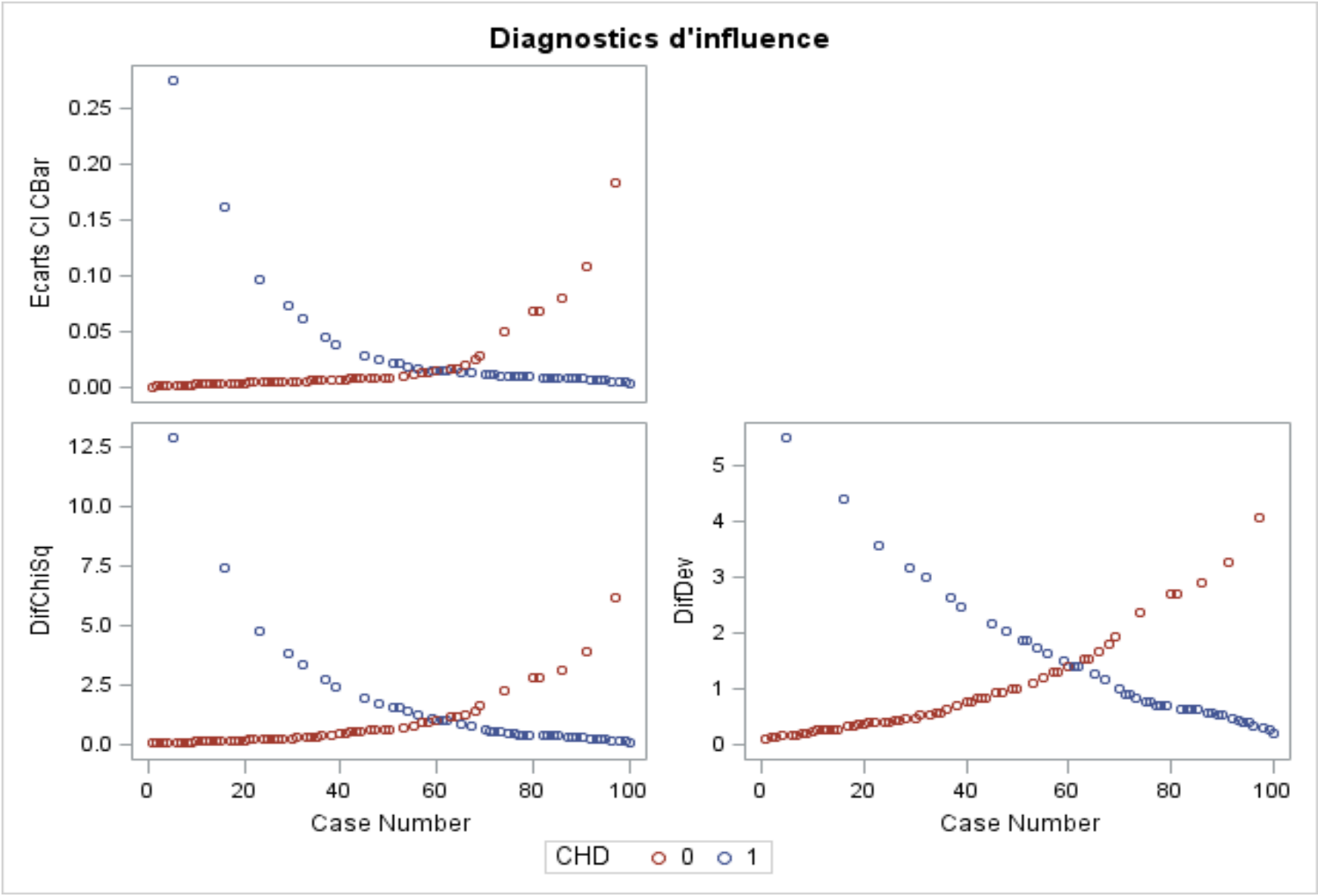
Regression Diagnostics

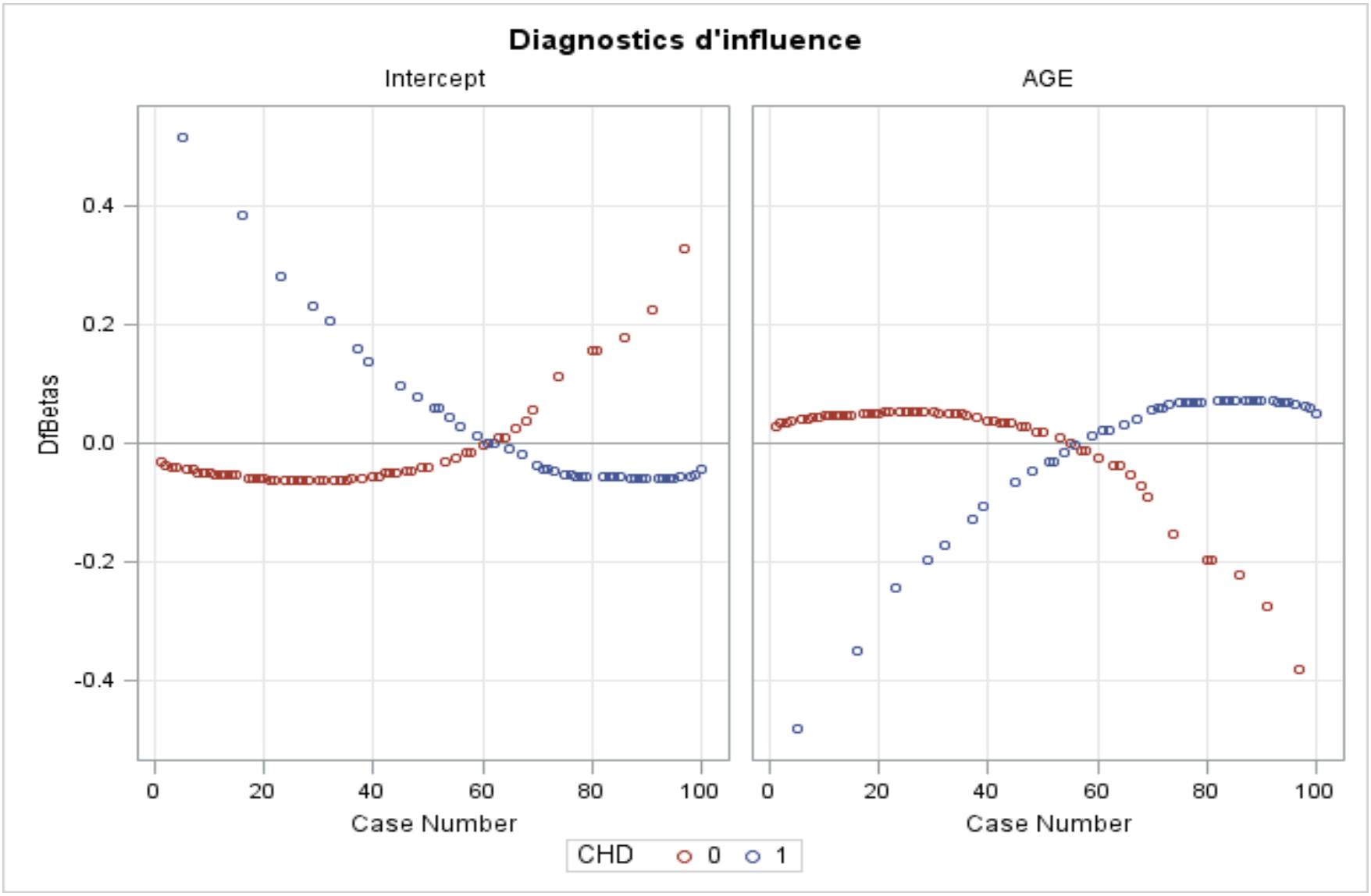
Case Number	Covariates AGE	Pearson Residual	Deviance Residual	Hat Matrix Diagonal	Intercept DfBeta	AGE DfBeta	Confidence Interval Displacement C	Confidence Interval Displacement CBar	Delta Deviance	Delta Chi-Square
68	51.0000	-1.1898	-1.3281	0.0169	0.0396	-0.0705	0.0248	0.0244	1.7882	1.4399
69	52.0000	-1.2576	-1.3773	0.0180	0.0562	-0.0888	0.0296	0.0291	1.9259	1.6107
70	52.0000	0.7952	0.9899	0.0180	-0.0355	0.0561	0.0118	0.0116	0.9916	0.6439
71	53.0000	0.7523	0.9470	0.0193	-0.0418	0.0613	0.0113	0.0111	0.9080	0.5770
72	53.0000	0.7523	0.9470	0.0193	-0.0418	0.0613	0.0113	0.0111	0.9080	0.5770
73	54.0000	0.7117	0.9053	0.0205	-0.0470	0.0654	0.0108	0.0106	0.8302	0.5171
74	55.0000	-1.4853	-1.5265	0.0218	0.1130	-0.1509	0.0504	0.0493	2.3794	2.2553
75	55.0000	0.6733	0.8647	0.0218	-0.0512	0.0684	0.0104	0.0101	0.7578	0.4634
76	55.0000	0.6733	0.8647	0.0218	-0.0512	0.0684	0.0104	0.0101	0.7578	0.4634
77	56.0000	0.6369	0.8253	0.0231	-0.0544	0.0705	0.00984	0.00961	0.6907	0.4153
78	56.0000	0.6369	0.8253	0.0231	-0.0544	0.0705	0.00984	0.00961	0.6907	0.4153
79	56.0000	0.6369	0.8253	0.0231	-0.0544	0.0705	0.00984	0.00961	0.6907	0.4153
80	57.0000	-1.6595	-1.6265	0.0244	0.1562	-0.1975	0.0705	0.0688	2.7145	2.8228
81	57.0000	-1.6595	-1.6265	0.0244	0.1562	-0.1975	0.0705	0.0688	2.7145	2.8228
82	57.0000	0.6026	0.7871	0.0244	-0.0567	0.0717	0.00930	0.00907	0.6286	0.3722
83	57.0000	0.6026	0.7871	0.0244	-0.0567	0.0717	0.00930	0.00907	0.6286	0.3722
84	57.0000	0.6026	0.7871	0.0244	-0.0567	0.0717	0.00930	0.00907	0.6286	0.3722

Regression Diagnostics

Case Number	Covariates AGE	Pearson Residual	Deviance Residual	Hat Matrix Diagonal	Intercept DfBeta	AGE DfBeta	Confidence Interval Displacement C	Confidence Interval Displacement CBar	Delta Deviance	Delta Chi-Square
85	57.0000	0.6026	0.7871	0.0244	-0.0567	0.0717	0.00930	0.00907	0.6286	0.3722
86	58.0000	-1.7542	-1.6765	0.0255	0.1791	-0.2220	0.0828	0.0807	2.8914	3.1577
87	58.0000	0.5701	0.7502	0.0255	-0.0582	0.0722	0.00874	0.00852	0.5713	0.3335
88	58.0000	0.5701	0.7502	0.0255	-0.0582	0.0722	0.00874	0.00852	0.5713	0.3335
89	59.0000	0.5393	0.7146	0.0266	-0.0590	0.0719	0.00816	0.00795	0.5186	0.2988
90	59.0000	0.5393	0.7146	0.0266	-0.0590	0.0719	0.00816	0.00795	0.5186	0.2988
91	60.0000	-1.9599	-1.7761	0.0275	0.2270	-0.2732	0.1118	0.1087	3.2631	3.9500
92	60.0000	0.5102	0.6803	0.0275	-0.0591	0.0711	0.00757	0.00737	0.4701	0.2677
93	61.0000	0.4827	0.6472	0.0283	-0.0587	0.0698	0.00698	0.00678	0.4257	0.2398
94	62.0000	0.4567	0.6155	0.0289	-0.0578	0.0680	0.00639	0.00621	0.3850	0.2147
95	62.0000	0.4567	0.6155	0.0289	-0.0578	0.0680	0.00639	0.00621	0.3850	0.2147
96	63.0000	0.4320	0.5850	0.0293	-0.0565	0.0659	0.00581	0.00564	0.3479	0.1923
97	64.0000	-2.4467	-1.9718	0.0296	0.3288	-0.3806	0.1884	0.1828	4.0707	6.1693
98	64.0000	0.4087	0.5558	0.0296	-0.0549	0.0636	0.00526	0.00510	0.3140	0.1721
99	65.0000	0.3867	0.5279	0.0297	-0.0531	0.0610	0.00472	0.00458	0.2832	0.1541
100	69.0000	0.3097	0.4280	0.0287	-0.0442	0.0497	0.00292	0.00284	0.1861	0.0988


Diagnostics d'influence
Résidus de Pearson
4
2
0
-2
Résidus de l'écart
2
1
0
-1
-2
Niveau moyen
0.030
0.025
0.020
0.015
0.010
0.005
0.000
Ecarts CL C
0.25
0.20
0.15
0.10
0.05
0.00
0
20
40
60
80
100
Case Number
CHD
0
1


Diagnostics d'influence
Ecarts Cl CBar
0.25
0.20
0.15
0.10
0.05
0.00
DifChiSq
12.5
10.0
7.5
5.0
2.5
0.0
DifDev
5
4
3
2
1
0
0
20
40
60
80
100
Case Number
CHD
0
1


Diagnostics d'influence
Intercept
AGE
DfBetas
0.4
0.2
0.0
-0.2
-0.4
0
20
40
60
80
100
Case Number
CHD
0
1

PROBABILITES ESTIMEES

Obs.	ID	AGRP	AGE	CHD	_LEVEL_	pcalcule	inf95	sup95
1	1	1	20	0	1	0.04348	0.01207	0.14470
2	2	1	23	0	1	0.05962	0.01906	0.17145
3	3	1	24	0	1	0.06615	0.02216	0.18128
4	4	1	25	0	1	0.07334	0.02575	0.19159
5	5	1	25	1	1	0.07334	0.02575	0.19159
6	6	1	26	0	1	0.08125	0.02990	0.20241
7	7	1	26	0	1	0.08125	0.02990	0.20241
8	8	1	28	0	1	0.09942	0.04016	0.22560
9	9	1	28	0	1	0.09942	0.04016	0.22560
10	10	1	29	0	1	0.10980	0.04645	0.23802
11	11	2	30	0	1	0.12113	0.05364	0.25101
12	12	2	30	0	1	0.12113	0.05364	0.25101
13	13	2	30	0	1	0.12113	0.05364	0.25101
14	14	2	30	0	1	0.12113	0.05364	0.25101
15	15	2	30	0	1	0.12113	0.05364	0.25101
16	16	2	30	1	1	0.12113	0.05364	0.25101
17	17	2	32	0	1	0.14679	0.07112	0.27880
18	18	2	32	0	1	0.14679	0.07112	0.27880
19	19	2	33	0	1	0.16124	0.08163	0.29365
20	20	2	33	0	1	0.16124	0.08163	0.29365

Obs.	ID	AGRP	AGE	CHD	_LEVEL_	pcalcule	inf95	sup95
21	21	2	34	0	1	0.17681	0.09344	0.30918
22	22	2	34	0	1	0.17681	0.09344	0.30918
23	23	2	34	1	1	0.17681	0.09344	0.30918
24	24	2	34	0	1	0.17681	0.09344	0.30918
25	25	2	34	0	1	0.17681	0.09344	0.30918
26	26	3	35	0	1	0.19353	0.10665	0.32541
27	27	3	35	0	1	0.19353	0.10665	0.32541
28	28	3	36	0	1	0.21144	0.12133	0.34239
29	29	3	36	1	1	0.21144	0.12133	0.34239
30	30	3	36	0	1	0.21144	0.12133	0.34239
31	31	3	37	0	1	0.23052	0.13752	0.36016
32	32	3	37	1	1	0.23052	0.13752	0.36016
33	33	3	37	0	1	0.23052	0.13752	0.36016
34	34	3	38	0	1	0.25078	0.15523	0.37877
35	35	3	38	0	1	0.25078	0.15523	0.37877
36	36	3	39	0	1	0.27219	0.17445	0.39827
37	37	3	39	1	1	0.27219	0.17445	0.39827
38	38	4	40	0	1	0.29471	0.19510	0.41873
39	39	4	40	1	1	0.29471	0.19510	0.41873
40	40	4	41	0	1	0.31828	0.21704	0.44020
41	41	4	41	0	1	0.31828	0.21704	0.44020

Obs.	ID	AGRP	AGE	CHD	_LEVEL_	pcalcule	inf95	sup95
42	42	4	42	0	1	0.34282	0.24010	0.46272
43	43	4	42	0	1	0.34282	0.24010	0.46272
44	44	4	42	0	1	0.34282	0.24010	0.46272
45	45	4	42	1	1	0.34282	0.24010	0.46272
46	46	4	43	0	1	0.36822	0.26404	0.48635
47	47	4	43	0	1	0.36822	0.26404	0.48635
48	48	4	43	1	1	0.36822	0.26404	0.48635
49	49	4	44	0	1	0.39438	0.28861	0.51108
50	50	4	44	0	1	0.39438	0.28861	0.51108
51	51	4	44	1	1	0.39438	0.28861	0.51108
52	52	4	44	1	1	0.39438	0.28861	0.51108
53	53	5	45	0	1	0.42116	0.31352	0.53687
54	54	5	45	1	1	0.42116	0.31352	0.53687
55	55	5	46	0	1	0.44841	0.33849	0.56362
56	56	5	46	1	1	0.44841	0.33849	0.56362
57	57	5	47	0	1	0.47598	0.36330	0.59116
58	58	5	47	0	1	0.47598	0.36330	0.59116
59	59	5	47	1	1	0.47598	0.36330	0.59116
60	60	5	48	0	1	0.50369	0.38772	0.61926
61	61	5	48	1	1	0.50369	0.38772	0.61926
62	62	5	48	1	1	0.50369	0.38772	0.61926

Obs.	ID	AGRP	AGE	CHD	_LEVEL_	pcalcule	inf95	sup95
63	63	5	49	0	1	0.53138	0.41163	0.64762
64	64	5	49	0	1	0.53138	0.41163	0.64762
65	65	5	49	1	1	0.53138	0.41163	0.64762
66	66	6	50	0	1	0.55888	0.43493	0.67590
67	67	6	50	1	1	0.55888	0.43493	0.67590
68	68	6	51	0	1	0.58602	0.45755	0.70375
69	69	6	52	0	1	0.61265	0.47950	0.73085
70	70	6	52	1	1	0.61265	0.47950	0.73085
71	71	6	53	1	1	0.63862	0.50078	0.75688
72	72	6	53	1	1	0.63862	0.50078	0.75688
73	73	6	54	1	1	0.66380	0.52139	0.78159
74	74	7	55	0	1	0.68809	0.54137	0.80480
75	75	7	55	1	1	0.68809	0.54137	0.80480
76	76	7	55	1	1	0.68809	0.54137	0.80480
77	77	7	56	1	1	0.71139	0.56074	0.82637
78	78	7	56	1	1	0.71139	0.56074	0.82637
79	79	7	56	1	1	0.71139	0.56074	0.82637
80	80	7	57	0	1	0.73362	0.57951	0.84623
81	81	7	57	0	1	0.73362	0.57951	0.84623
82	82	7	57	1	1	0.73362	0.57951	0.84623
83	83	7	57	1	1	0.73362	0.57951	0.84623

Obs.	ID	AGRP	AGE	CHD	_LEVEL_	pcalcule	inf95	sup95
84	84	7	57	1	1	0.73362	0.57951	0.84623
85	85	7	57	1	1	0.73362	0.57951	0.84623
86	86	7	58	0	1	0.75472	0.59771	0.86436
87	87	7	58	1	1	0.75472	0.59771	0.86436
88	88	7	58	1	1	0.75472	0.59771	0.86436
89	89	7	59	1	1	0.77467	0.61535	0.88079
90	90	7	59	1	1	0.77467	0.61535	0.88079
91	91	8	60	0	1	0.79344	0.63245	0.89556
92	92	8	60	1	1	0.79344	0.63245	0.89556
93	93	8	61	1	1	0.81103	0.64901	0.90878
94	94	8	62	1	1	0.82745	0.66504	0.92052
95	95	8	62	1	1	0.82745	0.66504	0.92052
96	96	8	63	1	1	0.84272	0.68055	0.93092
97	97	8	64	0	1	0.85687	0.69554	0.94007
98	98	8	64	1	1	0.85687	0.69554	0.94007
99	99	8	65	1	1	0.86994	0.71001	0.94811
100	100	8	69	1	1	0.91246	0.76287	0.97124

```
      Graphe de pcalcule*AGE.  Légende : A = 1 obs, B = 2 obs, etc.
      Graphe de inf95*AGE.     Légende : A = 1 obs, B = 2 obs, etc.
      Graphe de sup95*AGE.     Légende : A = 1 obs, B = 2 obs, etc.
```