# ${\rm BN}$ - Assignment 2

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#### 1 Already there:

1.1 Investigate what is the effect of data discretisation on the structure of the learnt Bayesian

network, e.g., in terms of number of arcs, changes in arc direction, etc., by considering three discretisations of the continuous features in the iris dataset with different number of bins (see Section B.3). Do this for both classes of learning algorithms and compare the results.

- 1.1.1 there: get discretization for data set
- 1.1.2 Missing: write what "number of arcs, changes in arc direction, etc" changes there are
- 1.2 Investigate what is the effect of the size of the dataset on the structure of the learnt

Bayesian network by considering three subsets of the breast cancer dataset with different 7number of samples. Do this for both classes of learning algorithms and compare the results.

- 1.2.1 there: get size of dataset changed and plot
- 1.2.2 Missing: invesitgate "number of arcs, changes in arc direction, etc"
- 1.3 Define measures that can be used to determine the quality of a learning algorithm in

terms of a known Bayesian network structure. Motivate the definition of these measures

- 1.3.1 there: Define ???
- 1.3.2 Missing: motivate???
- 1.4 Use these measures in order to evaluate the quality of both classes of learning algorithms

for the NHL dataset.

- 1.4.1 there: plot NHL algorithm
- 1.4.2 Missing: evaluate NHL with new measure
- 1.5 Compare the marginal probability distributions of the learnt NHL Bayesian network with

those of the manually constructed network.

- 1.5.1 there: marginal probabilities
- 1.5.2 Missing: comparisson, find manually constructed network
- 1.6 Learn a Bayesian network from the breast cancer dataset using a searchand-score or

constraint-based algorithm

- 1.6.1 there: Done
- **1.6.2** Missing:
- 1.7 Develop a special purpose (e.g., NBN or TAN) Bayesian network (see Section B.2 in

the appendix).

- 1.7.1 there: Done
- **1.7.2** Missing:
- 1.8 Compare the Bayesian network obtained by step (6) and the special purpose Bayesian

network from (7) with the manually constructed network in Figure 2 in terms of network structure, goodness of fit scores (e.g., likelihood) and accuracy using measures such as misclassification error and area under the ROC curve from cross-validation (see Section B.2 in the appendix)

- 1.8.1 there:
- 1.8.2 Missing: comparission

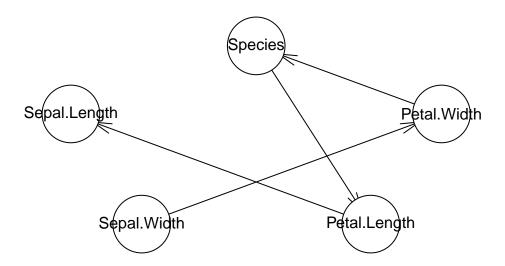
### 2 comparison of two learning algos

#### 2.1 data discretization

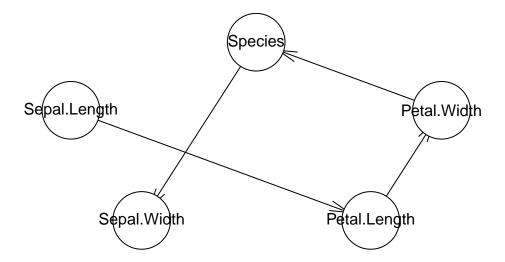
data discretization: number of arcs, changes in arc direction,... three discretizations in the iris data with different number of bins (B.3). Do this for both classes (constraing based oder search and score). Comppare the results

```
for( bins in c(3,5,7)){
tmp=discretize(iris[-5], method = 'hartemink',ibreaks=bins)
NewIris = cbind(tmp,iris[5])
IrisNetsb <- tabu(NewIris)
plot(IrisNetsb, font.main = 1, main = paste("SB, ibreaks = ", bins))
}</pre>
```

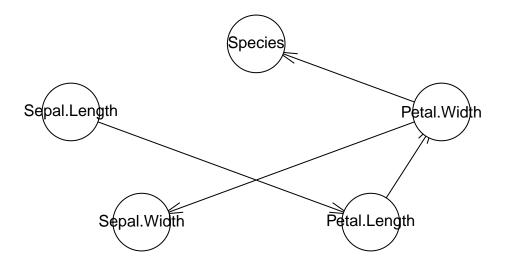
SB, ibreaks = 3



SB, ibreaks = 5



# SB, ibreaks = 7

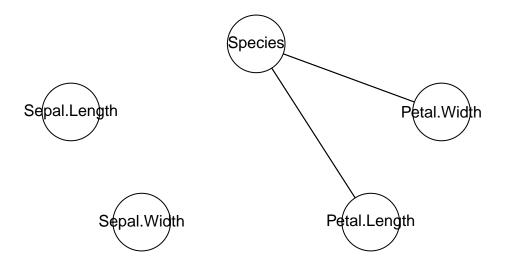


```
for( bins in c(3,5,7)){
  tmp=discretize(iris[-5], method = 'hartemink',ibreaks=bins)
  NewIris = cbind(tmp,iris[5])

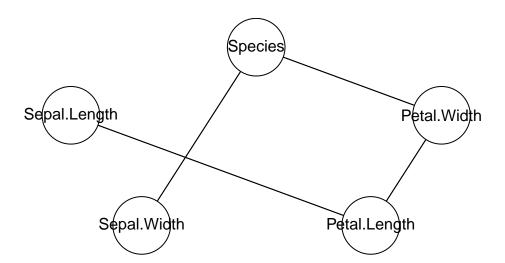
IrisNetcb <- iamb(NewIris)

plot(IrisNetcb, font.main = 1, main = paste("CB, ibreaks = ", bins))
}</pre>
```

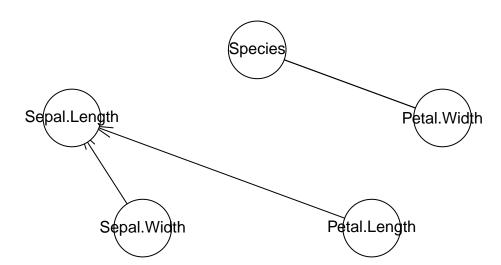
CB, ibreaks = 3



CB, ibreaks = 5



CB, ibreaks = 7



#### constraint based:

- grow-shrink (GS())
- $\bullet$  incremental association markov blanket (IAMB())
- interleaved incremental Association (inter-IAMB)

#### score based learning algos:

- Hill climbing (HC)
- Tabu search (Tabu)

#### 2.2 size of dataset

 $consider \ subsets \ of \ BC\text{-}dataset \ with \ different \ number \ of \ samples. \ both \ classes \ of \ learning \ algios, \ compare \ results$ 

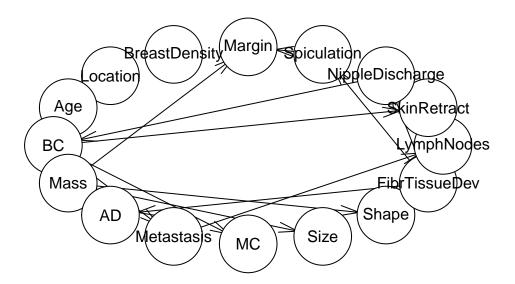
```
a <- read.csv('bc.csv')

for(part in c(10,2,1)){
   ind = sample(1:(nrow(a)/part))
   BC <- a[ind,]

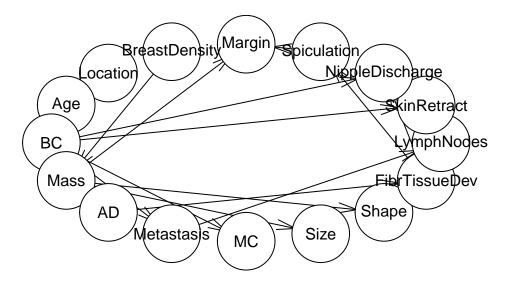
   BC_cbl <- tabu(BC)

   plot(BC_cbl , font.main = 1, main = paste("CB, every ", part, "Datapoint"))
}</pre>
```

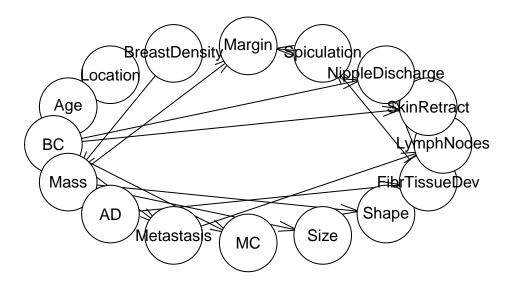
CB, every 10 Datapoint



CB, every 2 Datapoint



## CB, every 1 Datapoint

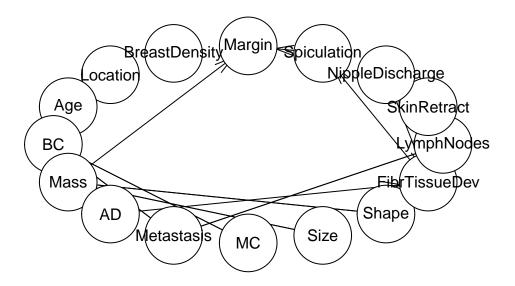


```
for(part in c(1,2,10)){
   ind = sample(1:(nrow(a)/part))
   BC <- a[ind,]

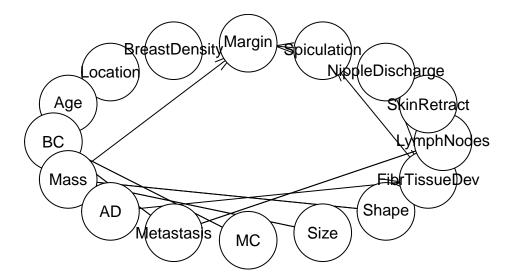
BC_sbl <- iamb(BC)

plot(BC_sbl, font.main = 1, main = paste("SB, every ", part, "Datapoint"))
}</pre>
```

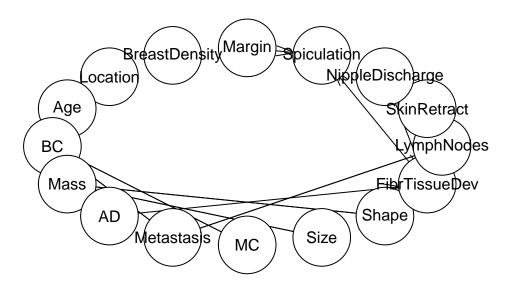
SB, every 1 Datapoint



SB, every 2 Datapoint



SB, every 10 Datapoint

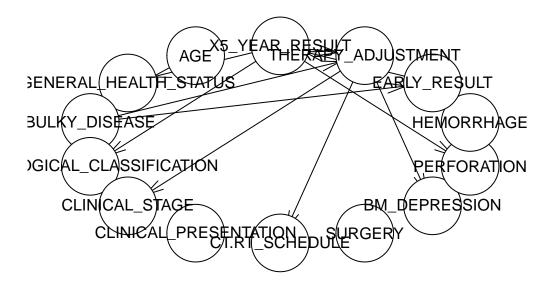


#### 2.3 comparison to manually constructed bayes network

```
Tmp = read.csv("nhl.csv",nrows = 5)
class = rep(list("factor"),ncol(Tmp))
NHL = read.csv("nhl.csv",colClasses = class)
#impute(NHL[,c(2:ncol(Tmp))], fun=median)
#impute(NHL)
#impute(NHL[c(2:3),],fun=median)
Tmp2<- complete.cases(NHL)</pre>
NHL <- NHL[Tmp2,]</pre>
NHLnet_sbl <- tabu(NHL)</pre>
## Warning in check.data(x): variable AGE has levels that are not observed in
## the data.
## Warning in check.data(x): variable BM_DEPRESSION has levels that are not
## observed in the data.
NHLnet_cbl <- iamb(NHL)</pre>
## Warning in check.data(x): variable AGE has levels that are not observed in
## the data.
## Warning in check.data(x): variable BM_DEPRESSION has levels that are not
## observed in the data.
plot(NHLnet_sbl)
title("NHL sbl")
plot(NHLnet_cbl)
title("NHL cbl")
```

NHL dataset, liad column classes as factor (A.4) missing data: probably median since mean desn't make sense for factors. check for differences, unterschiedleihe zahl nodes is ok.

#### NHL sbl



## 3 define measures for quality of a learning algorithm in terms of a known bayes network structure, motivate definition

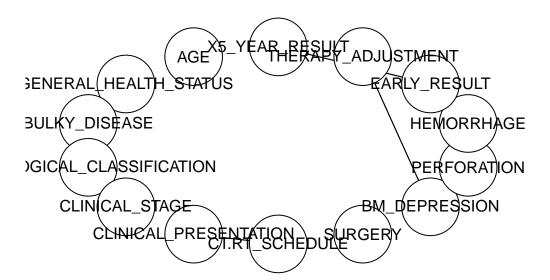
I have to be hones: I do not really understand that Question. Do the authors suggest I find a measure that is original in describing the quality of a bayesian Network? I'm sure that can't be true.

My measure for quality of the learning algorithm is Aruhga, which is the Quotient between nodes and vertices.

$$Aruhga = \frac{Nodes}{Vertices}$$

Arhuga is a binary measure with the classes {useful, not useful}, depending on wether Aruhga falls inside the interval  $[\alpha, \beta]$ .  $\alpha$  and  $\beta$  are depending heavily on the purpose and topic of the network and should normally be defined by logical reasoning before constructing the network. However, since the expert knowledge and necessary publications are not always readily available, the author provides some default values with  $\alpha=2.3$  and  $\beta=1.2/Nodes!$ . Please note that Aruhga is a measure of the connectivity of the network. values above alpha may indicate that too many nodes are used, thus either weakening the correlation between the single nodes OR bringing in Nodes that are not relevant for each other. Networks with a value below beta indicate that the network is highly connected which might reduce functionality and also might point to a circular relationship between variables in the real world that cannot be represented by a DAG.

#### **NHL** cbl



#### 3.1 use measures to evaluate both classes of learning algs for NHL dataset

#### 3.1.1 iris data set

learnt with score learning algorithm: Aruhga = 5/4 = 1.25; beta = 1.2/5 = 0.002. learnt with Constraint based algorithm: Aruhga = 5/2 = 2.5; beta = 1.2/5 = 0.002

While the score learning algorithm scores well in terms of Aruhga, the constraint based algorithm falls out of the default interval. Given that sepal.length, sepal.width and petal.length are likely caused by the species, we would say that the constraint based algorithm performs poorly on this dataset.

#### 3.1.2 Breast cancer dataset

nodes = 16, vertices = scoreFull =

#### 3.1.3 NHL

# 3.2 compare margial prob distributions of learnt NHL bN with those of the manually coinstructed ones

since constraint based aslgorithms do not necessarily produce directed graphs, we will only examine score based algorithms.

```
fittedNHL = bn.fit(NHLnet_sbl,NHL)
## Warning in check.data(data): variable AGE has levels that are not observed
## in the data.
## Warning in check.data(data): variable BM DEPRESSION has levels that are
## not observed in the data.
#fittedNHL2 = bn.fit(NHLnet_cbl,NHL)
# diagnostic BN structures
fittedNHL
##
##
     Bayesian network parameters
##
##
     Parameters of node AGE (multinomial distribution)
##
## Conditional probability table:
##
##
                                     11
## 0.009345794 0.224299065 0.084112150 0.000000000 0.046728972 0.028037383
## 0.130841121 0.121495327 0.140186916 0.084112150 0.130841121
##
     Parameters of node GENERAL_HEALTH_STATUS (multinomial distribution)
##
##
## Conditional probability table:
##
##
                        X5_YEAR_RESULT
## GENERAL_HEALTH_STATUS
                       1 0.3965517 0.1632653
##
                       2 0.6034483 0.5918367
                       3 0.0000000 0.2448980
##
##
##
     Parameters of node BULKY_DISEASE (multinomial distribution)
##
## Conditional probability table:
##
##
           1
## 0.7383178 0.2616822
##
     Parameters of node HISTOLOGICAL_CLASSIFICATION (multinomial distribution)
##
##
## Conditional probability table:
##
                               X5_YEAR_RESULT
## HISTOLOGICAL_CLASSIFICATION
                                         1
##
                              1 0.63793103 0.18367347
                              2 0.34482759 0.81632653
##
##
                              3 0.01724138 0.00000000
```

##

```
##
     Parameters of node CLINICAL_STAGE (multinomial distribution)
##
  Conditional probability table:
##
##
##
                 THERAPY ADJUSTMENT
## CLINICAL STAGE
                           0
                                       1
                1 0.75555556 0.17647059
##
                2 0.11111111 0.17647059
##
##
                3 0.04444444 0.29411765
                4 0.00000000 0.11764706
##
##
                5 0.08888889 0.23529412
##
     Parameters of node CLINICAL_PRESENTATION (multinomial distribution)
##
##
  Conditional probability table:
##
##
##
  0.644859813 0.168224299 0.177570093 0.009345794
##
    Parameters of node CT.RT_SCHEDULE (multinomial distribution)
##
##
## Conditional probability table:
##
                 THERAPY ADJUSTMENT
##
## CT.RT_SCHEDULE
                           0
                                       1
                0 0.01111111 0.00000000
##
                1 0.93333333 0.29411765
                2 0.04444444 0.29411765
##
                3 0.01111111 0.41176471
##
##
##
     Parameters of node SURGERY (multinomial distribution)
##
##
  Conditional probability table:
##
##
## 0.79439252 0.14953271 0.05607477
##
##
    Parameters of node BM_DEPRESSION (multinomial distribution)
##
## Conditional probability table:
##
##
                THERAPY_ADJUSTMENT
## BM_DEPRESSION
                         0
               1 1.0000000 0.0000000
##
               2 0.0000000 0.8823529
##
               3 0.0000000 0.1176471
##
               9 0.0000000 0.0000000
##
##
     Parameters of node PERFORATION (multinomial distribution)
##
##
## Conditional probability table:
##
##
              X5_YEAR_RESULT
                                    2
## PERFORATION
```

```
##
             1 1.00000000 0.93877551
             2 0.00000000 0.06122449
##
##
     Parameters of node HEMORRHAGE (multinomial distribution)
##
##
  Conditional probability table:
##
##
##
            1
  0.92523364 0.07476636
##
##
     Parameters of node EARLY_RESULT (multinomial distribution)
##
  Conditional probability table:
##
##
##
               BULKY_DISEASE
  EARLY_RESULT
                          1
##
              1 0.89873418 0.50000000
##
              2 0.03797468 0.25000000
##
              3 0.03797468 0.03571429
##
              4 0.02531646 0.21428571
##
##
    Parameters of node THERAPY_ADJUSTMENT (multinomial distribution)
##
## Conditional probability table:
##
##
   , , X5\_YEAR\_RESULT = 1
##
                      BULKY_DISEASE
##
## THERAPY_ADJUSTMENT
                               1
                    0 1.0000000 0.5714286
##
##
                    1 0.0000000 0.4285714
##
##
   , , X5\_YEAR\_RESULT = 2
##
##
                      BULKY DISEASE
## THERAPY_ADJUSTMENT
                               1
##
                    0 0.8214286 0.5714286
##
                    1 0.1785714 0.4285714
##
##
##
     Parameters of node X5_YEAR_RESULT (multinomial distribution)
##
  Conditional probability table:
##
##
                 EARLY_RESULT
## X5_YEAR_RESULT
                                     2
                                                3
                           1
                1 0.6705882 0.1000000 0.0000000 0.0000000
##
##
                2 0.3294118 0.9000000 1.0000000 1.0000000
```

#### #fittedNHL2

get the manually constructed network:

```
manual = read.net("nhl.net")
#manual
\#manNet = bn.fit(manual,a)
names(manual)
##
    [1] "POST SURGICAL SURVIVAL"
                                       "AGE"
##
    [3] "CLINICAL_STAGE"
                                       "HELICOBACTER_TREATMENT"
   [5] "CLINICAL_PRESENTATION"
                                       "EARLY_RESULT"
##
   [7] "SURGERY"
                                       "THERAPY_ADJUSTMENT"
   [9] "CT RT SCHEDULE"
                                       "POST CT RT SURVIVAL"
## [11] "HISTOLOGICAL_CLASSIFICATION" "ERADICATION"
## [13] "HEMORRHAGE"
                                       "BULKY DISEASE"
## [15] "PERFORATION"
                                       "IMMEDIATE_SURVIVAL"
## [17] "GENERAL_HEALTH_STATUS"
                                       "FIVE_YEAR_RESULT"
## [19] "HELICOBACTER_PYLORI"
                                       "BM_DEPRESSION"
typeof(manual)
## [1] "list"
manual
##
##
     Bayesian network parameters
##
##
     Parameters of node POST_SURGICAL_SURVIVAL (multinomial distribution)
##
## Conditional probability table:
##
   , , SURGERY = NONE, GENERAL_HEALTH_STATUS = POOR
##
##
                         CLINICAL PRESENTATION
## POST_SURGICAL_SURVIVAL NONE HEMORRHAGE PERFORATION OBSTRUCTION
##
                      NO 0.00
                                      0.20
                                                  0.90
                                                               0.30
                      YES 1.00
##
                                      0.80
                                                  0.10
                                                               0.70
##
  , , SURGERY = CURATIVE, GENERAL_HEALTH_STATUS = POOR
##
                         CLINICAL_PRESENTATION
##
## POST_SURGICAL_SURVIVAL NONE HEMORRHAGE PERFORATION OBSTRUCTION
##
                      NO 0.20
                                      0.40
                                                  0.50
                                                               0.25
##
                      YES 0.80
                                      0.60
                                                  0.50
                                                               0.75
##
   , , SURGERY = PALLIATIVE, GENERAL_HEALTH_STATUS = POOR
##
##
##
                         CLINICAL_PRESENTATION
## POST_SURGICAL_SURVIVAL NONE HEMORRHAGE PERFORATION OBSTRUCTION
##
                      NO 0.40
                                      0.60
                                                  0.60
                                                               0.40
##
                      YES 0.60
                                      0.40
                                                  0.40
                                                               0.60
##
```

```
## , , SURGERY = NONE, GENERAL_HEALTH_STATUS = AVERAGE
##
                         CLINICAL PRESENTATION
##
## POST_SURGICAL_SURVIVAL NONE HEMORRHAGE PERFORATION OBSTRUCTION
##
                      NO 0.00
                                      0.10
                                                  0.80
##
                      YES 1.00
                                      0.90
                                                  0.20
                                                              0.90
   , , SURGERY = CURATIVE, GENERAL_HEALTH_STATUS = AVERAGE
##
##
                         CLINICAL_PRESENTATION
##
## POST_SURGICAL_SURVIVAL NONE HEMORRHAGE PERFORATION OBSTRUCTION
                      NO 0.10
                                      0.15
##
                                                  0.25
                                                              0.10
                      YES 0.90
                                                  0.75
##
                                      0.85
                                                              0.90
##
   , , SURGERY = PALLIATIVE, GENERAL_HEALTH_STATUS = AVERAGE
##
                         CLINICAL_PRESENTATION
##
## POST_SURGICAL_SURVIVAL NONE HEMORRHAGE PERFORATION OBSTRUCTION
                                      0.30
##
                      NO 0.20
                                                  0.35
                                                              0.20
                      YES 0.80
##
                                      0.70
                                                  0.65
                                                              0.80
##
  , , SURGERY = NONE, GENERAL_HEALTH_STATUS = GOOD
##
                         CLINICAL PRESENTATION
##
## POST_SURGICAL_SURVIVAL NONE HEMORRHAGE PERFORATION OBSTRUCTION
                      NO 0.00
                                     0.05
                                                  0.70
                      YES 1.00
##
                                      0.95
                                                  0.30
                                                              0.98
   , , SURGERY = CURATIVE, GENERAL_HEALTH_STATUS = GOOD
##
##
                         CLINICAL_PRESENTATION
## POST_SURGICAL_SURVIVAL NONE HEMORRHAGE PERFORATION OBSTRUCTION
##
                      NO 0.03
                                      0.10
                                                  0.10
                                                              0.05
##
                      YES 0.97
                                      0.90
                                                  0.90
                                                              0.95
   , , SURGERY = PALLIATIVE, GENERAL_HEALTH_STATUS = GOOD
##
##
##
                         CLINICAL_PRESENTATION
## POST SURGICAL SURVIVAL NONE HEMORRHAGE PERFORATION OBSTRUCTION
##
                      NO 0.10
                                     0.20
                                                  0.30
                                                              0.12
##
                      YES 0.90
                                      0.80
                                                  0.70
                                                              0.88
##
##
     Parameters of node AGE (multinomial distribution)
##
##
## Conditional probability table:
##
        v10_19
                   v20 29
                              v30_39
                                          v40 44
                                                     v45 49
                                                                 v50 54
  0.00500000 0.02999999 0.06000000 0.07000000 0.07000000 0.10000000
                  v60_64
                                                    v80_89
       v55_59
                             v65_69
                                         v70_79
## 0.12000000 0.15000000 0.15000000 0.20000000 0.04000000 0.00500000
##
     Parameters of node CLINICAL STAGE (multinomial distribution)
##
##
## Conditional probability table:
```

```
##
##
                AGF.
                                 v20 29
  CLINICAL STAGE
                      v10 19
                                            v30 39
                                                        v40 44
                0.250000000 0.250000010 0.500000000 0.600000018 0.600000018
##
##
             II1 0.300000000 0.300000012 0.250000000 0.200000006 0.200000006
             II2 0.250000000 0.250000010 0.150000020 0.100000003 0.100000003
##
             IV 0.200000000 0.199999968 0.0999999980 0.0999999973 0.0999999973
##
##
                AGE
  CLINICAL_STAGE
##
                      v50_54
                                  v55_59
                                              v60_64
                                                         v65_69
                0.600000018 0.600000000 0.500000005 0.425000004 0.250000000
             II1 0.200000006 0.200000000 0.250000003 0.275000003 0.350000000
##
             II2 0.100000003 0.100000000 0.150000002 0.150000002 0.250000030
##
             III 0.000000000 0.000000000 0.000000000 0.010000000 0.010000000
##
             IV 0.099999973 0.100000000 0.099999991 0.139999991 0.1399999970
##
##
                AGE
## CLINICAL_STAGE
                      v80_89
                                   vGE90
                0.249999980 0.200000000
             II1 0.349999972 0.275000000
##
##
             II2 0.250000010 0.225000000
##
             III 0.009999999 0.100000000
             IV 0.140000039 0.200000000
##
##
    Parameters of node HELICOBACTER TREATMENT (multinomial distribution)
##
##
## Conditional probability table:
     NO YES
##
## 0.55 0.45
##
##
    Parameters of node CLINICAL_PRESENTATION (multinomial distribution)
##
## Conditional probability table:
##
          NONE HEMORRHAGE PERFORATION OBSTRUCTION
   0.84999999 0.12000000 0.02000000 0.01000001
##
##
    Parameters of node EARLY_RESULT (multinomial distribution)
##
##
## Conditional probability table:
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_C
##
              CT RT SCHEDULE
##
## EARLY RESULT
                     NONE
                                    RT
                                                CT CT_NEXT_RT
            CR 0.000000000 0.899999937 0.750000015 0.949999953
##
            PR 0.000000000 0.019999999 0.100000002 0.029999999
            NC 0.100000000 0.029999998 0.070000001 0.010000000
##
            PD 0.900000000 0.050000066 0.079999982 0.010000049
##
##
##
   , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGIC
##
              CT_RT_SCHEDULE
##
## EARLY RESULT
                      NONE
                                    RT
                                                CT CT_NEXT_RT
##
            CR 0.899999991 0.950000000 0.900000000 0.949999962
            PR 0.050000000 0.050000000 0.100000000 0.029999999
##
```

```
##
            PD 0.050000009 0.000000000 0.000000000 0.020000039
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOG
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                     NONE
                                             CT CT NEXT RT
                                  RT
##
            CR 0.000000000 0.899999964 0.900000000 0.949999962
            PR 0.000000000 0.019999999 0.100000000 0.029999999
##
            ##
##
            PD 1.000000000 0.080000037 0.000000000 0.020000039
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.899999937 0.650000000 0.849999941
##
            PR 0.000000000 0.019999999 0.100000000 0.029999998
##
            NC 0.100000000 0.029999998 0.070000000 0.009999999
##
##
            PD 0.900000000 0.050000066 0.180000000 0.110000062
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGI
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.899999991 0.950000000 0.900000000 0.949999962
            PR 0.050000000 0.050000000 0.100000000 0.029999999
##
            ##
            PD 0.050000009 0.000000000 0.000000000 0.020000039
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLO
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                    NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.899999964 0.900000000 0.949999962
##
            PR 0.000000000 0.019999999 0.100000000 0.029999999
##
            PD 1.000000000 0.080000037 0.000000000 0.020000039
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT_NEXT_RT
            CR 0.000000000 0.750000023 0.650000000 0.850000017
##
            PR 0.000000000 0.100000003 0.100000000 0.100000002
##
            NC 0.100000000 0.050000002 0.120000000 0.030000001
##
            PD 0.900000000 0.099999973 0.130000000 0.019999980
##
##
##
   , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOG
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT_NEXT_RT
##
            CR 0.699999986 0.850000026 0.700000000 0.900000000
##
            PR 0.199999996 0.050000002 0.100000000 0.100000000
```

```
##
            PD 0.100000018 0.099999973 0.200000000 0.000000000
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOL
##
##
             CT RT SCHEDULE
##
                                             CT CT_NEXT_RT
## EARLY RESULT
                     NONE
                                  RT
##
            CR 0.000000000 0.750000015 0.700000000 0.900000000
##
            PR 0.000000000 0.100000002 0.100000000 0.100000000
            ##
##
            PD 1.000000000 0.149999983 0.200000000 0.000000000
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICA
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.00000000 0.750000023 0.549999966 0.750000000
##
            PR 0.000000000 0.100000003 0.100000003 0.100000000
##
            NC 0.100000000 0.050000002 0.120000004 0.030000000
##
            PD 0.900000000 0.099999973 0.230000027 0.120000000
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLO
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.699999986 0.850000026 0.700000000 0.900000000
            PR 0.19999996 0.050000002 0.100000000 0.100000000
##
            ##
            PD 0.100000018 0.099999973 0.200000000 0.000000000
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTO
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                    NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.750000015 0.700000000 0.900000000
##
            PR 0.000000000 0.100000002 0.100000000 0.100000000
##
            PD 1.000000000 0.149999983 0.200000000 0.000000000
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT NEXT RT
            CR 0.00000000 0.40000000 0.499999980 0.649999994
##
            PR 0.000000000 0.200000000 0.149999994 0.199999998
##
            NC 0.100000000 0.200000000 0.199999999 0.099999999
##
            PD 0.900000000 0.200000000 0.150000034 0.050000009
##
##
##
   , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOG
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT_NEXT_RT
##
            CR 0.400000000 0.500000000 0.500000000 0.649999974
##
            PR 0.250000000 0.250000000 0.150000000 0.199999992
```

```
##
            PD 0.350000000 0.250000000 0.350000000 0.150000034
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOL
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.000000000 0.400000000 0.500000000 0.649999974
##
            PR 0.000000000 0.200000000 0.150000000 0.199999992
            ##
##
            PD 1.000000000 0.400000000 0.350000000 0.150000034
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICA
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.00000000 0.40000000 0.40000000 0.549999955
##
            PR 0.000000000 0.200000000 0.150000000 0.200000002
##
            NC 0.100000000 0.200000000 0.200000000 0.100000001
##
            PD 0.900000000 0.200000000 0.250000000 0.150000042
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLO
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.400000000 0.500000000 0.500000000 0.649999974
            PR 0.250000000 0.250000000 0.150000000 0.199999992
##
            ##
            PD 0.350000000 0.250000000 0.350000000 0.150000034
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTO
##
             CT_RT_SCHEDULE
##
## EARLY_RESULT
                    NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.400000000 0.500000000 0.649999974
##
            PR 0.000000000 0.200000000 0.150000000 0.199999992
##
            PD 1.000000000 0.400000000 0.350000000 0.150000034
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT NEXT RT
            CR 0.00000000 0.000000000 0.400000000 0.449999978
##
            PR 0.00000000 0.150000000 0.150000000 0.199999990
##
            NC 0.100000000 0.200000000 0.200000000 0.149999993
##
            PD 0.900000000 0.650000000 0.250000000 0.200000040
##
##
##
   , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOG
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT_NEXT_RT
##
            CR 0.000000000 0.000000000 0.400000000 0.450000000
##
            PR 0.250000000 0.300000000 0.150000000 0.200000000
```

```
##
            PD 0.750000000 0.700000000 0.450000000 0.350000000
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOL
##
##
             CT RT SCHEDULE
##
                                             CT CT_NEXT_RT
## EARLY RESULT
                     NONE
                                  RT
##
            CR 0.000000000 0.000000000 0.400000000 0.450000000
##
            PR 0.000000000 0.300000000 0.150000000 0.200000000
            ##
##
            PD 1.000000000 0.700000000 0.450000000 0.350000000
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICA
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.000000000 0.300000012 0.350000018
##
            PR 0.000000000 0.150000000 0.150000006 0.200000010
##
            NC 0.100000000 0.200000000 0.200000008 0.150000008
##
            PD 0.900000000 0.650000000 0.349999974 0.299999965
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLO
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
            CR 0.000000000 0.000000000 0.400000000 0.450000000
##
            PR 0.250000000 0.300000000 0.150000000 0.200000000
##
            ##
            PD 0.750000000 0.700000000 0.450000000 0.350000000
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTO
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                    NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.000000000 0.400000000 0.450000000
##
            PR 0.000000000 0.300000000 0.150000000 0.200000000
##
            PD 1.000000000 0.700000000 0.450000000 0.350000000
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT NEXT RT
            CR 0.00000000 0.000000000 0.400000000 0.449999978
##
            PR 0.00000000 0.150000000 0.150000000 0.199999990
##
            NC 0.100000000 0.200000000 0.200000000 0.149999993
##
            PD 0.900000000 0.650000000 0.250000000 0.200000040
##
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGI
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                    NONE
                                  RT
                                             CT CT_NEXT_RT
##
            CR 0.000000000 0.000000000 0.400000000 0.450000000
##
            PR 0.250000000 0.300000000 0.150000000 0.200000000
```

```
##
            PD 0.750000000 0.700000000 0.450000000 0.350000000
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLO
##
##
             CT RT SCHEDULE
##
                                             CT CT NEXT RT
## EARLY RESULT
                     NONE
                                  RT
##
            CR 0.000000000 0.000000000 0.400000000 0.450000000
##
            PR 0.000000000 0.300000000 0.150000000 0.200000000
            ##
##
            PD 1.000000000 0.700000000 0.450000000 0.350000000
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.000000000 0.300000012 0.350000018
##
            PR 0.000000000 0.150000000 0.150000006 0.200000010
##
            NC 0.100000000 0.200000000 0.200000008 0.150000008
##
            PD 0.900000000 0.650000000 0.349999974 0.299999965
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOG
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.000000000 0.000000000 0.400000000 0.450000000
            PR 0.250000000 0.300000000 0.150000000 0.200000000
##
            ##
            PD 0.750000000 0.700000000 0.450000000 0.350000000
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOL
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                    NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.000000000 0.400000000 0.450000000
##
            PR 0.000000000 0.300000000 0.150000000 0.200000000
##
            PD 1.000000000 0.700000000 0.450000000 0.350000000
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CL
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT NEXT RT
            CR 0.00000000 0.949999953 0.800000040 0.949999953
##
            PR 0.00000000 0.019999999 0.100000005 0.029999999
##
           NC 0.100000000 0.019999999 0.050000003 0.010000000
##
            PD 0.900000000 0.010000049 0.049999952 0.010000049
##
##
##
   , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICA
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                             CT CT_NEXT_RT
##
            CR 0.899999991 0.950000000 0.800000024 0.949999962
##
           PR 0.050000000 0.050000000 0.100000003 0.029999999
```

```
##
            PD 0.050000009 0.000000000 0.099999973 0.020000039
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGI
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                     NONE
                                             CT CT NEXT RT
                                  RT
##
            CR 0.000000000 0.949999972 0.800000024 0.949999962
            PR 0.000000000 0.019999999 0.100000003 0.029999999
##
            ##
##
            PD 1.000000000 0.030000029 0.099999973 0.020000039
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_C
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.949999953 0.700000014 0.849999941
##
            PR 0.000000000 0.019999999 0.100000002 0.029999998
##
            NC 0.100000000 0.019999999 0.050000001 0.009999999
##
##
            PD 0.900000000 0.010000049 0.149999983 0.110000062
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGIC
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.899999991 0.950000000 0.800000024 0.949999962
            PR 0.050000000 0.050000000 0.100000003 0.029999999
##
            ##
            PD 0.050000009 0.000000000 0.099999973 0.020000039
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOG
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                   NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.949999972 0.800000024 0.949999962
##
            PR 0.000000000 0.019999999 0.100000003 0.029999999
##
           PD 1.000000000 0.030000029 0.099999973 0.020000039
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT_NEXT_RT
            CR 0.000000000 0.800000040 0.700000021 0.850000017
##
            PR 0.000000000 0.100000005 0.100000003 0.100000002
##
           NC 0.100000000 0.050000003 0.100000003 0.030000001
##
            PD 0.900000000 0.049999952 0.099999973 0.019999980
##
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGI
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                             CT CT_NEXT_RT
##
            CR 0.699999986 0.899999991 0.700000000 0.900000000
##
           PR 0.199999996 0.050000000 0.100000000 0.100000000
```

```
##
            PD 0.100000018 0.050000009 0.200000000 0.000000000
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLO
##
##
             CT RT SCHEDULE
##
                                             CT CT_NEXT_RT
## EARLY RESULT
                     NONE
                                  RT
##
            CR 0.000000000 0.800000024 0.700000000 0.900000000
##
            PR 0.000000000 0.100000003 0.100000000 0.100000000
            ##
##
            PD 1.000000000 0.099999973 0.200000000 0.000000000
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.00000000 0.800000040 0.599999984 0.750000000
##
            PR 0.000000000 0.100000005 0.100000004 0.100000000
##
            NC 0.100000000 0.050000003 0.100000004 0.030000000
##
            PD 0.900000000 0.049999952 0.200000008 0.120000000
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOG
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.699999986 0.899999991 0.700000000 0.900000000
            PR 0.19999996 0.050000000 0.100000000 0.100000000
##
            ##
            PD 0.100000018 0.050000009 0.200000000 0.000000000
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOL
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                    NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.800000024 0.700000000 0.900000000
##
            PR 0.000000000 0.100000003 0.100000000 0.100000000
##
            PD 1.000000000 0.099999973 0.200000000 0.000000000
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT NEXT RT
            CR 0.000000000 0.499999990 0.599999988 0.649999994
##
            PR 0.000000000 0.249999995 0.149999997 0.199999998
##
            NC 0.100000000 0.149999997 0.149999999 0.099999999
##
            PD 0.90000000 0.100000018 0.100000018 0.050000009
##
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGI
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                             CT CT_NEXT_RT
##
            CR 0.500000000 0.550000011 0.600000000 0.649999974
##
            PR 0.250000000 0.300000006 0.150000000 0.199999992
```

```
##
            PD 0.250000000 0.149999983 0.250000000 0.150000034
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLO
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                     NONE
                                             CT CT NEXT RT
                                  RT
##
            CR 0.000000000 0.500000000 0.600000000 0.649999974
##
            PR 0.000000000 0.250000000 0.150000000 0.199999992
            ##
##
            PD 1.000000000 0.250000000 0.250000000 0.150000034
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.49999999 0.499999975 0.549999955
##
            PR 0.000000000 0.249999995 0.149999993 0.200000002
##
            NC 0.100000000 0.149999997 0.149999993 0.100000001
##
##
            PD 0.900000000 0.100000018 0.200000040 0.150000042
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOG
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.500000000 0.550000011 0.600000000 0.649999974
            PR 0.250000000 0.300000006 0.150000000 0.199999992
##
            ##
            PD 0.250000000 0.149999983 0.250000000 0.150000034
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOL
##
             CT_RT_SCHEDULE
##
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.500000000 0.600000000 0.649999974
##
            PR 0.000000000 0.250000000 0.150000000 0.199999992
##
            PD 1.000000000 0.250000000 0.250000000 0.150000034
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT NEXT RT
            CR 0.000000000 0.000000000 0.449999978 0.500000010
##
            PR 0.000000000 0.200000000 0.199999990 0.250000005
##
            NC 0.100000000 0.200000000 0.149999993 0.100000002
##
            PD 0.900000000 0.600000000 0.200000040 0.149999983
##
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGI
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                             CT CT NEXT RT
##
            CR 0.000000000 0.000000000 0.450000000 0.500000000
##
            PR 0.300000000 0.400000000 0.200000000 0.250000000
```

```
##
            PD 0.700000000 0.600000000 0.350000000 0.250000000
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLO
##
##
             CT RT SCHEDULE
##
                                             CT CT_NEXT_RT
## EARLY RESULT
                     NONE
                                  RT
##
            CR 0.000000000 0.000000000 0.450000000 0.500000000
##
            PR 0.000000000 0.400000000 0.200000000 0.250000000
            ##
##
            PD 1.000000000 0.600000000 0.350000000 0.250000000
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.00000000 0.000000000 0.350000018 0.400000000
##
            PR 0.000000000 0.200000000 0.200000010 0.250000000
##
            NC 0.100000000 0.200000000 0.150000008 0.100000000
##
            PD 0.900000000 0.600000000 0.299999965 0.250000000
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOG
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
            CR 0.000000000 0.000000000 0.450000000 0.500000000
##
            PR 0.30000000 0.40000000 0.20000000 0.250000000
##
            ##
            PD 0.70000000 0.600000000 0.350000000 0.250000000
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOL
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                   NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.000000000 0.450000000 0.500000000
##
            PR 0.000000000 0.400000000 0.200000000 0.250000000
##
            PD 1.000000000 0.600000000 0.350000000 0.250000000
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_C
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT NEXT RT
            CR 0.000000000 0.000000000 0.449999978 0.500000010
##
            PR 0.000000000 0.200000000 0.199999990 0.250000005
##
           NC 0.100000000 0.200000000 0.149999993 0.100000002
##
            PD 0.900000000 0.600000000 0.200000040 0.149999983
##
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGIC
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                    NONE
                                  RT
                                             CT CT_NEXT_RT
##
            CR 0.000000000 0.000000000 0.450000000 0.500000000
##
            PR 0.300000000 0.400000000 0.200000000 0.250000000
```

```
##
            PD 0.700000000 0.600000000 0.350000000 0.250000000
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOG
##
##
             CT RT SCHEDULE
##
                                             CT CT_NEXT_RT
## EARLY RESULT
                     NONE
                                  RT
##
            CR 0.000000000 0.000000000 0.450000000 0.500000000
##
            PR 0.000000000 0.400000000 0.200000000 0.250000000
            ##
##
            PD 1.000000000 0.600000000 0.350000000 0.250000000
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.00000000 0.000000000 0.350000018 0.400000000
##
            PR 0.000000000 0.200000000 0.200000010 0.250000000
##
            NC 0.100000000 0.200000000 0.150000008 0.100000000
##
            PD 0.900000000 0.600000000 0.299999965 0.250000000
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGI
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.000000000 0.000000000 0.450000000 0.500000000
            PR 0.30000000 0.40000000 0.20000000 0.250000000
##
            ##
            PD 0.70000000 0.600000000 0.350000000 0.250000000
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLO
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                    NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.000000000 0.450000000 0.500000000
##
            PR 0.000000000 0.400000000 0.200000000 0.250000000
##
           PD 1.000000000 0.600000000 0.350000000 0.250000000
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_C
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT NEXT RT
            CR 0.000000000 0.600000054 0.750000015 0.800000040
##
            PR 0.000000000 0.100000009 0.100000002 0.100000005
##
           NC 0.000000000 0.100000009 0.070000001 0.050000003
##
##
            PD 1.000000000 0.199999928 0.079999982 0.049999952
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGIC
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                    NONE
                                             CT CT NEXT RT
##
            CR 0.600000000 0.699999986 0.750000015 0.800000024
            PR 0.200000000 0.199999996 0.100000002 0.100000003
##
```

```
##
            PD 0.200000000 0.100000018 0.149999983 0.099999973
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOG
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                     NONE
                                             CT CT NEXT RT
                                  RT
##
            CR 0.000000000 0.600000030 0.750000015 0.800000024
##
            PR 0.000000000 0.100000005 0.100000002 0.100000003
            ##
##
            PD 1.000000000 0.299999965 0.149999983 0.099999973
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.600000054 0.650000000 0.700000014
##
            PR 0.000000000 0.100000009 0.100000000 0.100000002
##
            NC 0.000000000 0.100000009 0.070000000 0.050000001
##
##
            PD 1.000000000 0.199999928 0.180000000 0.149999983
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGI
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.600000000 0.699999986 0.750000015 0.800000024
            PR 0.200000000 0.199999996 0.100000002 0.100000003
##
            ##
            PD 0.200000000 0.100000018 0.149999983 0.099999973
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLO
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.600000030 0.750000015 0.800000024
##
            PR 0.000000000 0.100000005 0.100000002 0.100000003
##
            PD 1.000000000 0.299999965 0.149999983 0.099999973
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT_NEXT_RT
            CR 0.000000000 0.499999975 0.700000021 0.750000023
##
            PR 0.000000000 0.149999993 0.100000003 0.100000003
##
            NC 0.000000000 0.149999993 0.100000003 0.050000002
##
            PD 1.000000000 0.200000040 0.099999973 0.099999973
##
##
##
   , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOG
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                             CT CT_NEXT_RT
##
            CR 0.550000028 0.649999968 0.700000000 0.750000015
           PR 0.150000008 0.149999993 0.100000000 0.100000002
##
```

```
##
            PD 0.299999965 0.200000040 0.200000000 0.149999983
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOL
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT_NEXT_RT
##
            CR 0.000000000 0.500000000 0.700000000 0.750000015
            PR 0.000000000 0.150000000 0.100000000 0.100000002
##
            ##
##
            PD 1.000000000 0.350000000 0.200000000 0.149999983
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICA
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.00000000 0.499999975 0.599999984 0.650000000
##
            PR 0.000000000 0.149999993 0.100000004 0.100000000
##
            NC 0.000000000 0.149999993 0.100000004 0.050000000
##
##
            PD 1.000000000 0.200000040 0.200000008 0.200000000
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLO
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.550000028 0.649999968 0.700000000 0.750000015
            PR 0.150000008 0.149999993 0.100000000 0.100000002
##
            ##
            PD 0.299999965 0.200000040 0.200000000 0.149999983
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTO
##
             CT_RT_SCHEDULE
##
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.500000000 0.700000000 0.750000015
##
            PR 0.000000000 0.150000000 0.100000000 0.100000002
##
            PD 1.000000000 0.350000000 0.200000000 0.149999983
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT_NEXT_RT
            CR 0.000000000 0.300000000 0.500000000 0.550000011
##
            PR 0.000000000 0.200000000 0.100000000 0.150000003
##
            NC 0.00000000 0.100000000 0.200000000 0.150000003
##
            PD 1.000000000 0.400000000 0.200000000 0.149999983
##
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOG
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.350000000 0.400000000 0.500000000 0.550000028
##
            PR 0.300000000 0.250000000 0.100000000 0.150000008
```

```
##
            PD 0.350000000 0.350000000 0.400000000 0.299999965
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOL
##
##
             CT RT SCHEDULE
##
                                             CT CT_NEXT_RT
## EARLY RESULT
                     NONE
                                  RT
##
            CR 0.000000000 0.350000000 0.500000000 0.550000028
##
            PR 0.000000000 0.200000000 0.100000000 0.150000008
            ##
##
            PD 1.000000000 0.450000000 0.400000000 0.299999965
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICA
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.00000000 0.300000000 0.400000000 0.450000000
##
            PR 0.000000000 0.200000000 0.100000000 0.150000000
##
            NC 0.000000000 0.100000000 0.200000000 0.150000000
##
            PD 1.000000000 0.400000000 0.300000000 0.250000000
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLO
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
            CR 0.350000000 0.400000000 0.500000000 0.550000028
##
            PR 0.300000000 0.250000000 0.100000000 0.150000008
##
            ##
            PD 0.350000000 0.350000000 0.400000000 0.299999965
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTO
##
             CT_RT_SCHEDULE
##
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.350000000 0.500000000 0.550000028
##
            PR 0.000000000 0.200000000 0.100000000 0.150000008
##
            PD 1.000000000 0.450000000 0.400000000 0.299999965
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT NEXT RT
            CR 0.00000000 0.000000000 0.400000000 0.449999982
##
            PR 0.000000000 0.150000000 0.150000000 0.199999992
##
            NC 0.000000000 0.150000000 0.200000000 0.199999992
##
            PD 1.000000000 0.700000000 0.250000000 0.150000034
##
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOG
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT_NEXT_RT
##
            CR 0.000000000 0.000000000 0.400000000 0.450000000
##
            PR 0.200000000 0.300000000 0.150000000 0.200000000
```

```
##
            PD 0.800000000 0.700000000 0.450000000 0.350000000
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOL
##
##
             CT RT SCHEDULE
##
                                             CT CT_NEXT_RT
## EARLY RESULT
                     NONE
                                  RT
##
            CR 0.000000000 0.000000000 0.400000000 0.450000000
##
            PR 0.000000000 0.300000000 0.150000000 0.200000000
            ##
##
            PD 1.000000000 0.700000000 0.450000000 0.350000000
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICA
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.000000000 0.300000012 0.350000000
##
            PR 0.000000000 0.150000000 0.150000006 0.200000000
##
            NC 0.000000000 0.150000000 0.200000008 0.200000000
##
            PD 1.000000000 0.700000000 0.349999974 0.250000000
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLO
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
            CR 0.000000000 0.000000000 0.400000000 0.450000000
##
            PR 0.200000000 0.300000000 0.150000000 0.200000000
##
            ##
            PD 0.800000000 0.700000000 0.450000000 0.350000000
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTO
##
             CT_RT_SCHEDULE
##
## EARLY_RESULT
                    NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.000000000 0.400000000 0.450000000
##
            PR 0.000000000 0.300000000 0.150000000 0.200000000
##
            PD 1.000000000 0.700000000 0.450000000 0.350000000
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT NEXT RT
            CR 0.000000000 0.000000000 0.400000000 0.449999982
##
            PR 0.000000000 0.150000000 0.150000000 0.199999992
##
            NC 0.000000000 0.150000000 0.200000000 0.199999992
##
            PD 1.000000000 0.700000000 0.250000000 0.150000034
##
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGI
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.000000000 0.000000000 0.400000000 0.450000000
            PR 0.200000000 0.300000000 0.150000000 0.200000000
##
```

```
##
            PD 0.800000000 0.700000000 0.450000000 0.350000000
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLO
##
##
             CT RT SCHEDULE
##
                                             CT CT NEXT RT
## EARLY RESULT
                     NONE
                                  RT
##
            CR 0.000000000 0.000000000 0.400000000 0.450000000
##
            PR 0.000000000 0.300000000 0.150000000 0.200000000
            ##
##
            PD 1.000000000 0.700000000 0.450000000 0.350000000
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.000000000 0.300000012 0.350000000
##
            PR 0.000000000 0.150000000 0.150000006 0.200000000
##
            NC 0.000000000 0.150000000 0.200000008 0.200000000
##
            PD 1.000000000 0.700000000 0.349999974 0.250000000
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOG
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.000000000 0.000000000 0.400000000 0.450000000
            PR 0.200000000 0.300000000 0.150000000 0.200000000
##
            ##
            PD 0.800000000 0.700000000 0.450000000 0.350000000
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOL
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.000000000 0.400000000 0.450000000
##
            PR 0.000000000 0.300000000 0.150000000 0.200000000
##
            PD 1.000000000 0.700000000 0.450000000 0.350000000
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CL
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT NEXT RT
            CR 0.000000000 0.850000043 0.899999964 0.899999964
##
            PR 0.00000000 0.050000003 0.049999998 0.049999998
##
            NC 0.00000000 0.050000003 0.029999999 0.029999999
##
            PD 1.000000000 0.049999952 0.020000039 0.020000039
##
##
##
   , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICA
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                             CT CT_NEXT_RT
##
            CR 0.749999985 0.899999991 0.899999991 0.899999991
##
            PR 0.149999997 0.050000000 0.050000000 0.050000000
```

```
##
            PD 0.100000018 0.050000009 0.050000009 0.050000009
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGI
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.000000000 0.850000026 0.899999991 0.899999991
##
            PR 0.000000000 0.0500000002 0.050000000 0.0500000000
            ##
##
            PD 1.000000000 0.099999973 0.050000009 0.050000009
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_C
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.850000043 0.799999942 0.799999942
##
            PR 0.000000000 0.050000003 0.050000000 0.050000000
##
            NC 0.000000000 0.050000003 0.030000000 0.030000000
##
##
            PD 1.000000000 0.049999952 0.120000059 0.120000059
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGIC
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.749999985 0.899999991 0.899999991 0.899999991
            PR 0.149999997 0.050000000 0.050000000 0.050000000
##
            ##
            PD 0.100000018 0.050000009 0.050000009 0.050000009
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOG
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.850000026 0.899999991 0.899999991
##
            PR 0.000000000 0.050000002 0.050000000 0.050000000
##
           PD 1.000000000 0.099999973 0.050000009 0.050000009
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT_NEXT_RT
            CR 0.000000000 0.700000021 0.800000040 0.850000043
##
            PR 0.000000000 0.100000003 0.100000005 0.050000003
##
           NC 0.000000000 0.100000003 0.050000003 0.050000003
##
##
            PD 1.000000000 0.099999973 0.049999952 0.049999952
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGI
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                             CT CT NEXT RT
##
            CR 0.649999968 0.800000024 0.800000024 0.850000026
            PR 0.149999993 0.100000003 0.100000003 0.050000002
##
```

```
##
            PD 0.200000040 0.099999973 0.099999973 0.099999973
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLO
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                     NONE
                                             CT CT NEXT RT
                                  RT
##
            CR 0.000000000 0.700000000 0.800000024 0.850000026
##
            PR 0.000000000 0.100000000 0.100000003 0.050000002
            ##
##
            PD 1.000000000 0.200000000 0.099999973 0.099999973
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.700000021 0.700000014 0.750000015
##
            PR 0.000000000 0.100000003 0.100000002 0.050000001
##
            NC 0.000000000 0.100000003 0.050000001 0.050000001
##
##
            PD 1.000000000 0.099999973 0.149999983 0.149999983
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOG
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.649999968 0.800000024 0.800000024 0.850000026
            PR 0.149999993 0.100000003 0.100000003 0.050000002
##
            ##
            PD 0.200000040 0.099999973 0.099999973 0.099999973
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOL
##
             CT_RT_SCHEDULE
##
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.700000000 0.800000024 0.850000026
##
            PR 0.000000000 0.100000000 0.100000003 0.050000002
##
            PD 1.000000000 0.200000000 0.099999973 0.099999973
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT NEXT RT
            CR 0.000000000 0.400000000 0.700000021 0.749999993
##
            PR 0.000000000 0.200000000 0.100000003 0.149999999
##
            NC 0.00000000 0.200000000 0.100000003 0.050000000
##
            PD 1.000000000 0.200000000 0.099999973 0.050000009
##
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGI
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                             CT CT_NEXT_RT
##
            CR 0.400000020 0.500000000 0.700000000 0.749999985
##
           PR 0.300000015 0.250000000 0.100000000 0.149999997
```

```
##
            PD 0.299999965 0.250000000 0.200000000 0.100000018
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLO
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.000000000 0.400000000 0.700000000 0.749999985
##
            PR 0.000000000 0.200000000 0.100000000 0.149999997
            ##
##
            PD 1.000000000 0.400000000 0.200000000 0.100000018
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.400000000 0.599999984 0.649999974
##
            PR 0.000000000 0.200000000 0.100000004 0.149999994
##
            NC 0.000000000 0.200000000 0.100000004 0.049999998
##
            PD 1.000000000 0.200000000 0.200000008 0.150000034
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOG
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.400000020 0.500000000 0.700000000 0.749999985
            PR 0.300000015 0.250000000 0.100000000 0.149999997
##
            ##
            PD 0.299999965 0.250000000 0.200000000 0.100000018
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOL
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                   NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.400000000 0.700000000 0.749999985
##
            PR 0.000000000 0.200000000 0.100000000 0.149999997
##
            PD 1.000000000 0.400000000 0.200000000 0.100000018
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT NEXT RT
            CR 0.000000000 0.000000000 0.600000012 0.649999994
##
            PR 0.000000000 0.300000000 0.150000003 0.199999998
##
            NC 0.00000000 0.20000000 0.100000002 0.099999999
##
            PD 1.000000000 0.500000000 0.149999983 0.050000009
##
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGI
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT_NEXT_RT
##
            CR 0.000000000 0.000000000 0.600000000 0.649999974
##
            PR 0.40000000 0.500000000 0.150000000 0.199999992
```

```
##
            PD 0.600000000 0.500000000 0.250000000 0.150000034
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLO
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.000000000 0.000000000 0.600000000 0.649999974
##
            PR 0.000000000 0.600000000 0.150000000 0.199999992
            ##
##
            PD 1.000000000 0.400000000 0.250000000 0.150000034
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.00000000 0.00000000 0.500000000 0.549999955
##
            PR 0.000000000 0.300000000 0.150000000 0.200000002
##
            NC 0.000000000 0.200000000 0.100000000 0.100000001
##
            PD 1.000000000 0.500000000 0.250000000 0.150000042
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOG
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
            CR 0.000000000 0.000000000 0.600000000 0.649999974
##
            PR 0.40000000 0.500000000 0.150000000 0.199999992
##
            ##
            PD 0.600000000 0.500000000 0.250000000 0.150000034
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOL
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                    NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.000000000 0.600000000 0.649999974
##
            PR 0.000000000 0.600000000 0.150000000 0.199999992
##
            PD 1.000000000 0.400000000 0.250000000 0.150000034
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_C
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT NEXT RT
            CR 0.000000000 0.000000000 0.600000012 0.649999994
##
            PR 0.000000000 0.300000000 0.150000003 0.199999998
##
            NC 0.00000000 0.20000000 0.100000002 0.099999999
##
            PD 1.000000000 0.500000000 0.149999983 0.050000009
##
##
##
   , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGIC
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT_NEXT_RT
##
            CR 0.000000000 0.000000000 0.600000000 0.649999974
            PR 0.40000000 0.500000000 0.150000000 0.199999992
##
```

```
##
            PD 0.600000000 0.500000000 0.250000000 0.150000034
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOG
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.000000000 0.000000000 0.600000000 0.649999974
##
            PR 0.000000000 0.600000000 0.150000000 0.199999992
            ##
##
            PD 1.000000000 0.400000000 0.250000000 0.150000034
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.00000000 0.00000000 0.500000000 0.549999955
##
            PR 0.000000000 0.300000000 0.150000000 0.200000002
##
            NC 0.000000000 0.200000000 0.100000000 0.100000001
##
            PD 1.000000000 0.500000000 0.250000000 0.150000042
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGI
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.000000000 0.000000000 0.600000000 0.649999974
            PR 0.40000000 0.500000000 0.150000000 0.199999992
##
            ##
            PD 0.600000000 0.500000000 0.250000000 0.150000034
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLO
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                    NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.000000000 0.600000000 0.649999974
##
            PR 0.000000000 0.600000000 0.150000000 0.199999992
##
           PD 1.000000000 0.400000000 0.250000000 0.150000034
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_C
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT NEXT RT
            CR 0.749999993 0.949999953 0.800000040 0.949999953
##
            PR 0.149999999 0.019999999 0.100000005 0.029999999
##
           NC 0.050000000 0.019999999 0.050000003 0.010000000
##
##
            PD 0.050000009 0.010000049 0.049999952 0.010000049
##
##
   , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGIC
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                             CT CT_NEXT_RT
##
            CR 0.899999991 0.950000000 0.900000000 0.949999962
##
           PR 0.050000000 0.050000000 0.100000000 0.029999999
```

```
##
            PD 0.050000009 0.000000000 0.000000000 0.020000039
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOG
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                     NONE
                                             CT CT NEXT RT
                                  RT
##
            CR 0.000000000 0.899999964 0.900000000 0.949999962
            PR 0.000000000 0.019999999 0.100000000 0.029999999
##
            ##
##
            PD 1.000000000 0.080000037 0.000000000 0.020000039
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.749999993 0.949999953 0.700000014 0.849999941
##
            PR 0.149999999 0.019999999 0.100000002 0.029999998
##
            NC 0.050000000 0.019999999 0.050000001 0.009999999
##
##
            PD 0.050000009 0.010000049 0.149999983 0.110000062
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGI
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.899999991 0.950000000 0.900000000 0.949999962
            PR 0.050000000 0.050000000 0.100000000 0.029999999
##
            ##
            PD 0.050000009 0.000000000 0.000000000 0.020000039
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLO
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                   NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.899999964 0.900000000 0.949999962
##
            PR 0.000000000 0.019999999 0.100000000 0.029999999
##
            PD 1.000000000 0.080000037 0.000000000 0.020000039
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT_NEXT_RT
            CR 0.100000000 0.800000040 0.700000035 0.850000017
##
            PR 0.150000000 0.100000005 0.150000008 0.100000002
##
           NC 0.100000000 0.050000003 0.100000005 0.030000001
##
            PD 0.650000000 0.049999952 0.049999952 0.019999980
##
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOG
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                             CT CT_NEXT_RT
##
            CR 0.699999986 0.850000026 0.700000000 0.900000000
##
           PR 0.199999996 0.050000002 0.100000000 0.100000000
```

```
##
            PD 0.100000018 0.099999973 0.200000000 0.000000000
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOL
##
##
             CT RT SCHEDULE
##
                                             CT CT_NEXT_RT
## EARLY RESULT
                     NONE
                                  RT
##
            CR 0.000000000 0.750000015 0.700000000 0.900000000
##
            PR 0.000000000 0.100000002 0.100000000 0.100000000
            ##
##
            PD 1.000000000 0.149999983 0.200000000 0.000000000
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICA
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.100000000 0.800000040 0.599999996 0.750000000
##
            PR 0.150000000 0.100000005 0.150000009 0.100000000
##
            NC 0.100000000 0.050000003 0.100000006 0.030000000
##
            PD 0.650000000 0.049999952 0.149999989 0.120000000
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLO
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.699999986 0.850000026 0.700000000 0.900000000
            PR 0.19999996 0.050000002 0.100000000 0.100000000
##
            ##
            PD 0.100000018 0.099999973 0.200000000 0.000000000
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTO
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.750000015 0.700000000 0.900000000
##
            PR 0.000000000 0.100000002 0.100000000 0.100000000
##
            PD 1.000000000 0.149999983 0.200000000 0.000000000
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                     NONE
                                  R.T
                                             CT CT NEXT RT
            CR 0.010000000 0.449999982 0.600000018 0.649999994
##
            PR 0.100000000 0.199999992 0.200000006 0.199999998
##
            NC 0.100000000 0.199999992 0.100000003 0.099999999
##
            PD 0.790000000 0.150000034 0.099999973 0.050000009
##
##
##
   , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOG
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT_NEXT_RT
##
            CR 0.400000000 0.500000000 0.500000000 0.649999974
##
            PR 0.250000000 0.250000000 0.150000000 0.199999992
```

```
##
            PD 0.350000000 0.250000000 0.350000000 0.150000034
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOL
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.000000000 0.400000000 0.500000000 0.649999974
##
            PR 0.000000000 0.200000000 0.150000000 0.199999992
            ##
##
            PD 1.000000000 0.400000000 0.350000000 0.150000034
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICA
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.010000000 0.449999982 0.500000000 0.549999955
##
            PR 0.100000000 0.199999992 0.200000000 0.200000002
##
            NC 0.100000000 0.199999992 0.100000000 0.100000001
##
##
            PD 0.790000000 0.150000034 0.200000000 0.150000042
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLO
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.400000000 0.500000000 0.500000000 0.649999974
            PR 0.250000000 0.250000000 0.150000000 0.199999992
##
            ##
            PD 0.350000000 0.250000000 0.350000000 0.150000034
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTO
##
             CT_RT_SCHEDULE
##
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.400000000 0.500000000 0.649999974
##
            PR 0.000000000 0.200000000 0.150000000 0.199999992
##
            PD 1.000000000 0.400000000 0.350000000 0.150000034
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT NEXT RT
            CR 0.000000000 0.000000000 0.400000000 0.449999978
##
            PR 0.100000000 0.350000000 0.200000000 0.199999990
##
            NC 0.100000000 0.400000000 0.200000000 0.149999993
##
            PD 0.800000000 0.250000000 0.200000000 0.200000040
##
##
##
   , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOG
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT_NEXT_RT
##
            CR 0.000000000 0.000000000 0.400000000 0.450000000
##
            PR 0.250000000 0.300000000 0.150000000 0.200000000
```

```
##
            PD 0.750000000 0.700000000 0.450000000 0.350000000
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOL
##
##
             CT RT SCHEDULE
##
                                             CT CT_NEXT_RT
## EARLY RESULT
                     NONE
                                  RT
##
            CR 0.000000000 0.000000000 0.400000000 0.450000000
##
            PR 0.000000000 0.300000000 0.150000000 0.200000000
            ##
##
            PD 1.000000000 0.700000000 0.450000000 0.350000000
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICA
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                  RT
                                             CT CT_NEXT_RT
            CR 0.000000000 0.000000000 0.300000000 0.350000018
##
            PR 0.100000000 0.350000000 0.200000000 0.200000010
##
            NC 0.100000000 0.400000000 0.200000000 0.150000008
##
            PD 0.800000000 0.250000000 0.300000000 0.299999965
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLO
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
            CR 0.000000000 0.000000000 0.400000000 0.450000000
##
            PR 0.250000000 0.300000000 0.150000000 0.200000000
##
            ##
            PD 0.750000000 0.700000000 0.450000000 0.350000000
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTO
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                    NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.000000000 0.400000000 0.450000000
##
            PR 0.000000000 0.300000000 0.150000000 0.200000000
##
            PD 1.000000000 0.700000000 0.450000000 0.350000000
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT_NEXT_RT
            CR 0.000000000 0.000000000 0.550000011 0.449999978
##
            PR 0.100000000 0.350000000 0.150000003 0.199999990
##
            NC 0.100000000 0.400000000 0.150000003 0.149999993
##
            PD 0.800000000 0.250000000 0.149999983 0.200000040
##
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGI
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                    NONE
                                  RT
                                             CT CT_NEXT_RT
##
            CR 0.000000000 0.000000000 0.400000000 0.450000000
##
            PR 0.250000000 0.300000000 0.150000000 0.200000000
```

```
##
            PD 0.750000000 0.700000000 0.450000000 0.350000000
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLO
##
##
             CT RT SCHEDULE
##
                                             CT CT NEXT RT
## EARLY RESULT
                     NONE
                                  RT
##
            CR 0.000000000 0.000000000 0.400000000 0.450000000
##
            PR 0.000000000 0.300000000 0.150000000 0.200000000
            ##
##
            PD 1.000000000 0.700000000 0.450000000 0.350000000
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                  RT
                                             CT CT_NEXT_RT
            CR 0.000000000 0.000000000 0.450000000 0.350000018
##
            PR 0.100000000 0.350000000 0.150000000 0.200000010
##
            NC 0.100000000 0.400000000 0.150000000 0.150000008
##
            PD 0.800000000 0.250000000 0.250000000 0.299999965
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOG
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
            CR 0.000000000 0.000000000 0.400000000 0.450000000
##
            PR 0.250000000 0.300000000 0.150000000 0.200000000
##
            ##
            PD 0.750000000 0.700000000 0.450000000 0.350000000
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOL
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                    NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.000000000 0.400000000 0.450000000
##
            PR 0.000000000 0.300000000 0.150000000 0.200000000
##
            PD 1.000000000 0.700000000 0.450000000 0.350000000
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CL
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                     NONE
                                  R.T
                                             CT CT NEXT RT
            CR 0.800000040 0.990000000 0.899999964 0.949999953
##
            PR 0.100000005 0.010000000 0.049999998 0.029999999
##
            NC 0.050000003 0.000000000 0.029999999 0.010000000
##
            PD 0.049999952 0.000000000 0.020000039 0.010000049
##
##
##
   , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICA
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.899999991 0.950000000 0.800000024 0.949999962
##
           PR 0.050000000 0.050000000 0.100000003 0.029999999
```

```
##
            PD 0.050000009 0.000000000 0.099999973 0.020000039
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGI
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                     NONE
                                             CT CT NEXT RT
                                  RT
##
            CR 0.000000000 0.949999972 0.800000024 0.949999962
            PR 0.000000000 0.019999999 0.100000003 0.029999999
##
            ##
##
            PD 1.000000000 0.030000029 0.099999973 0.020000039
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_C
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.800000040 0.990000000 0.799999942 0.849999941
##
            PR 0.100000005 0.010000000 0.050000000 0.029999998
##
            NC 0.050000003 0.000000000 0.030000000 0.009999999
##
            PD 0.049999952 0.000000000 0.120000059 0.110000062
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGIC
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.899999991 0.950000000 0.800000024 0.949999962
            PR 0.050000000 0.050000000 0.100000003 0.029999999
##
            ##
            PD 0.050000009 0.000000000 0.099999973 0.020000039
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOG
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                   NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.949999972 0.800000024 0.949999962
##
            PR 0.000000000 0.019999999 0.100000003 0.029999999
##
           PD 1.000000000 0.030000029 0.099999973 0.020000039
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT_NEXT_RT
            CR 0.200000000 0.899999964 0.800000040 0.850000017
##
            PR 0.150000000 0.049999998 0.100000005 0.100000002
##
           NC 0.150000000 0.029999999 0.050000003 0.030000001
##
            PD 0.500000000 0.020000039 0.049999952 0.019999980
##
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGI
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                             CT CT_NEXT_RT
##
            CR 0.699999986 0.899999991 0.700000000 0.900000000
##
           PR 0.199999996 0.050000000 0.100000000 0.100000000
```

```
##
            PD 0.100000018 0.050000009 0.200000000 0.000000000
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLO
##
##
             CT RT SCHEDULE
##
                                             CT CT_NEXT_RT
## EARLY RESULT
                     NONE
                                  RT
##
            CR 0.000000000 0.800000024 0.700000000 0.900000000
##
            PR 0.000000000 0.100000003 0.100000000 0.100000000
            ##
##
            PD 1.000000000 0.099999973 0.200000000 0.000000000
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.200000000 0.899999964 0.700000014 0.750000000
##
            PR 0.150000000 0.049999998 0.100000002 0.100000000
##
            NC 0.150000000 0.029999999 0.050000001 0.030000000
##
##
            PD 0.500000000 0.020000039 0.149999983 0.120000000
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOG
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.699999986 0.899999991 0.700000000 0.900000000
            PR 0.19999996 0.050000000 0.100000000 0.100000000
##
            ##
            PD 0.100000018 0.050000009 0.200000000 0.000000000
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOL
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                    NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.800000024 0.700000000 0.900000000
##
            PR 0.000000000 0.100000003 0.100000000 0.100000000
##
            PD 1.000000000 0.099999973 0.200000000 0.000000000
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT_NEXT_RT
            CR 0.020000000 0.550000011 0.700000021 0.649999994
##
            PR 0.100000000 0.150000003 0.100000003 0.199999998
##
            NC 0.150000000 0.150000003 0.100000003 0.099999999
##
            PD 0.730000000 0.149999983 0.099999973 0.050000009
##
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGI
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                             CT CT_NEXT_RT
##
            CR 0.500000000 0.550000011 0.600000000 0.649999974
##
            PR 0.250000000 0.300000006 0.150000000 0.199999992
```

```
##
            PD 0.250000000 0.149999983 0.250000000 0.150000034
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLO
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.000000000 0.500000000 0.600000000 0.649999974
##
            PR 0.000000000 0.250000000 0.150000000 0.199999992
            ##
##
            PD 1.000000000 0.250000000 0.250000000 0.150000034
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.020000000 0.550000011 0.599999984 0.549999955
##
            PR 0.100000000 0.150000003 0.100000004 0.200000002
##
            NC 0.150000000 0.150000003 0.100000004 0.100000001
##
##
            PD 0.730000000 0.149999983 0.200000008 0.150000042
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOG
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.500000000 0.550000011 0.600000000 0.649999974
            PR 0.250000000 0.300000006 0.150000000 0.199999992
##
            ##
            PD 0.250000000 0.149999983 0.250000000 0.150000034
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOL
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                    NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.500000000 0.600000000 0.649999974
##
            PR 0.000000000 0.250000000 0.150000000 0.199999992
##
            PD 1.000000000 0.250000000 0.250000000 0.150000034
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT_NEXT_RT
            CR 0.00000000 0.000000000 0.400000000 0.500000010
##
            PR 0.100000000 0.499999990 0.200000000 0.250000005
##
            NC 0.100000000 0.399999992 0.200000000 0.100000002
##
            PD 0.800000000 0.100000018 0.200000000 0.149999983
##
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGI
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT_NEXT_RT
##
            CR 0.000000000 0.000000000 0.450000000 0.500000000
##
            PR 0.300000000 0.400000000 0.200000000 0.250000000
```

```
##
            PD 0.700000000 0.600000000 0.350000000 0.250000000
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLO
##
##
             CT RT SCHEDULE
##
                                             CT CT_NEXT_RT
## EARLY RESULT
                     NONE
                                  RT
##
            CR 0.000000000 0.000000000 0.450000000 0.500000000
##
            PR 0.000000000 0.400000000 0.200000000 0.250000000
            ##
##
            PD 1.000000000 0.600000000 0.350000000 0.250000000
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                  RT
                                             CT CT_NEXT_RT
            CR 0.00000000 0.000000000 0.300000000 0.400000000
##
            PR 0.100000000 0.499999990 0.200000000 0.250000000
##
            NC 0.100000000 0.399999992 0.200000000 0.100000000
##
            PD 0.800000000 0.100000018 0.300000000 0.250000000
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOG
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.000000000 0.000000000 0.450000000 0.500000000
            PR 0.30000000 0.40000000 0.20000000 0.250000000
##
            ##
            PD 0.70000000 0.600000000 0.350000000 0.250000000
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOL
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                    NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.000000000 0.450000000 0.500000000
##
            PR 0.000000000 0.400000000 0.200000000 0.250000000
##
            PD 1.000000000 0.600000000 0.350000000 0.250000000
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_C
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT_NEXT_RT
            CR 0.000000000 0.000000000 0.550000011 0.500000010
##
            PR 0.100000000 0.499999990 0.150000003 0.250000005
##
            NC 0.100000000 0.399999992 0.150000003 0.100000002
##
            PD 0.800000000 0.100000018 0.149999983 0.149999983
##
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGIC
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                    NONE
                                  RT
                                             CT CT_NEXT_RT
##
            CR 0.000000000 0.000000000 0.450000000 0.500000000
            PR 0.300000000 0.400000000 0.200000000 0.250000000
##
```

```
##
            PD 0.700000000 0.600000000 0.350000000 0.250000000
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOG
##
##
             CT RT SCHEDULE
##
                                             CT CT NEXT RT
## EARLY RESULT
                     NONE
                                  RT
##
            CR 0.000000000 0.000000000 0.450000000 0.500000000
##
            PR 0.000000000 0.400000000 0.200000000 0.250000000
            ##
##
            PD 1.000000000 0.600000000 0.350000000 0.250000000
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.00000000 0.000000000 0.450000000 0.400000000
##
            PR 0.100000000 0.499999990 0.150000000 0.250000000
##
            NC 0.100000000 0.399999992 0.150000000 0.100000000
##
##
            PD 0.800000000 0.100000018 0.250000000 0.250000000
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGI
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.000000000 0.000000000 0.450000000 0.500000000
            PR 0.30000000 0.40000000 0.20000000 0.250000000
##
            ##
            PD 0.70000000 0.600000000 0.350000000 0.250000000
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLO
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                    NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.000000000 0.450000000 0.500000000
##
            PR 0.000000000 0.400000000 0.200000000 0.250000000
##
            PD 1.000000000 0.600000000 0.350000000 0.250000000
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_C
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT_NEXT_RT
            CR 0.100000000 0.600000054 0.750000015 0.800000040
##
            PR 0.100000000 0.100000009 0.100000002 0.100000005
##
           NC 0.050000000 0.100000009 0.070000001 0.050000003
##
##
            PD 0.750000000 0.199999928 0.079999982 0.049999952
##
##
   , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGIC
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                             CT CT_NEXT_RT
##
            CR 0.600000000 0.699999986 0.750000015 0.800000024
            PR 0.200000000 0.199999996 0.100000002 0.100000003
##
```

```
##
            PD 0.200000000 0.100000018 0.149999983 0.099999973
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOG
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                     NONE
                                             CT CT NEXT RT
                                  RT
##
            CR 0.000000000 0.600000030 0.750000015 0.800000024
##
            PR 0.000000000 0.100000005 0.100000002 0.100000003
            ##
##
            PD 1.000000000 0.299999965 0.1499999983 0.099999973
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.100000000 0.600000054 0.650000000 0.700000014
##
            PR 0.100000000 0.100000009 0.100000000 0.100000002
##
            NC 0.050000000 0.100000009 0.070000000 0.050000001
##
##
            PD 0.750000000 0.199999928 0.180000000 0.149999983
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGI
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.600000000 0.699999986 0.750000015 0.800000024
            PR 0.200000000 0.199999996 0.100000002 0.100000003
##
            ##
            PD 0.200000000 0.100000018 0.149999983 0.099999973
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLO
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.600000030 0.750000015 0.800000024
##
            PR 0.000000000 0.100000005 0.100000002 0.100000003
##
            PD 1.000000000 0.299999965 0.149999983 0.099999973
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT_NEXT_RT
            CR 0.050000000 0.499999975 0.700000021 0.750000023
##
            PR 0.050000000 0.149999993 0.100000003 0.100000003
##
           NC 0.050000000 0.149999993 0.100000003 0.050000002
##
            PD 0.850000000 0.200000040 0.099999973 0.099999973
##
##
##
   , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOG
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                             CT CT NEXT RT
##
            CR 0.550000028 0.649999968 0.700000000 0.750000015
##
           PR 0.150000008 0.149999993 0.100000000 0.100000002
```

```
##
            PD 0.299999965 0.200000040 0.200000000 0.149999983
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOL
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.000000000 0.500000000 0.700000000 0.750000015
##
            PR 0.000000000 0.150000000 0.100000000 0.100000002
            ##
##
            PD 1.000000000 0.350000000 0.200000000 0.149999983
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICA
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.050000000 0.499999975 0.599999984 0.650000000
##
            PR 0.050000000 0.149999993 0.100000004 0.100000000
##
            NC 0.050000000 0.149999993 0.100000004 0.050000000
##
            PD 0.850000000 0.200000040 0.200000008 0.200000000
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLO
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.550000028 0.649999968 0.700000000 0.750000015
            PR 0.150000008 0.149999993 0.100000000 0.100000002
##
            ##
            PD 0.299999965 0.200000040 0.200000000 0.149999983
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTO
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.500000000 0.700000000 0.750000015
##
            PR 0.000000000 0.150000000 0.100000000 0.100000002
##
            PD 1.000000000 0.350000000 0.200000000 0.149999983
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  RT
                                             CT CT_NEXT_RT
            CR 0.010000000 0.300000000 0.500000000 0.550000011
##
            PR 0.010000000 0.200000000 0.100000000 0.150000003
##
            NC 0.050000000 0.100000000 0.200000000 0.150000003
##
            PD 0.930000000 0.400000000 0.200000000 0.149999983
##
##
##
   , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOG
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT_NEXT_RT
##
            CR 0.350000000 0.400000000 0.500000000 0.550000028
##
            PR 0.300000000 0.250000000 0.100000000 0.150000008
```

```
##
            PD 0.350000000 0.350000000 0.400000000 0.299999965
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOL
##
##
             CT RT SCHEDULE
##
                                             CT CT_NEXT_RT
## EARLY RESULT
                     NONE
                                  RT
##
            CR 0.000000000 0.350000000 0.500000000 0.550000028
##
            PR 0.000000000 0.200000000 0.100000000 0.150000008
            ##
##
            PD 1.000000000 0.450000000 0.400000000 0.299999965
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICA
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.010000000 0.300000000 0.400000000 0.450000000
##
            PR 0.010000000 0.200000000 0.100000000 0.150000000
##
            NC 0.050000000 0.100000000 0.200000000 0.150000000
##
            PD 0.930000000 0.400000000 0.300000000 0.250000000
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLO
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
            CR 0.350000000 0.400000000 0.500000000 0.550000028
##
            PR 0.300000000 0.250000000 0.100000000 0.150000008
##
            ##
            PD 0.350000000 0.350000000 0.400000000 0.299999965
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTO
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                    NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.350000000 0.500000000 0.550000028
##
            PR 0.000000000 0.200000000 0.100000000 0.150000008
##
            PD 1.000000000 0.450000000 0.400000000 0.299999965
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT NEXT RT
            CR 0.00000000 0.000000000 0.400000000 0.449999982
##
            PR 0.020000000 0.150000000 0.150000000 0.199999992
##
            NC 0.040000000 0.150000000 0.200000000 0.199999992
##
            PD 0.940000000 0.700000000 0.250000000 0.150000034
##
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOG
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT_NEXT_RT
##
            CR 0.000000000 0.000000000 0.400000000 0.450000000
            PR 0.200000000 0.300000000 0.150000000 0.200000000
##
```

```
##
            PD 0.800000000 0.700000000 0.450000000 0.350000000
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOL
##
##
             CT RT SCHEDULE
##
                                             CT CT_NEXT_RT
## EARLY RESULT
                     NONE
                                  RT
##
            CR 0.000000000 0.000000000 0.400000000 0.450000000
##
            PR 0.000000000 0.300000000 0.150000000 0.200000000
            ##
##
            PD 1.000000000 0.700000000 0.450000000 0.350000000
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICA
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.000000000 0.300000012 0.350000000
##
            PR 0.020000000 0.150000000 0.150000006 0.200000000
##
            NC 0.040000000 0.150000000 0.200000008 0.200000000
##
            PD 0.940000000 0.700000000 0.349999974 0.250000000
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLO
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
            CR 0.000000000 0.000000000 0.400000000 0.450000000
##
            PR 0.200000000 0.300000000 0.150000000 0.200000000
##
            ##
            PD 0.800000000 0.700000000 0.450000000 0.350000000
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTO
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                    NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.000000000 0.400000000 0.450000000
##
            PR 0.000000000 0.300000000 0.150000000 0.200000000
##
            PD 1.000000000 0.700000000 0.450000000 0.350000000
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT NEXT RT
            CR 0.00000000 0.000000000 0.400000000 0.449999982
##
            PR 0.020000000 0.150000000 0.150000000 0.199999992
##
            NC 0.040000000 0.150000000 0.200000000 0.199999992
##
            PD 0.940000000 0.700000000 0.250000000 0.150000034
##
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGI
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                    NONE
                                  RT
                                             CT CT_NEXT_RT
##
            CR 0.000000000 0.000000000 0.400000000 0.450000000
##
            PR 0.200000000 0.300000000 0.150000000 0.200000000
```

```
##
            PD 0.800000000 0.700000000 0.450000000 0.350000000
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLO
##
##
             CT RT SCHEDULE
##
                                             CT CT NEXT RT
## EARLY RESULT
                     NONE
                                  RT
##
            CR 0.000000000 0.000000000 0.400000000 0.450000000
##
            PR 0.000000000 0.300000000 0.150000000 0.200000000
            ##
##
            PD 1.000000000 0.700000000 0.450000000 0.350000000
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.000000000 0.300000012 0.350000000
##
            PR 0.020000000 0.150000000 0.150000006 0.200000000
##
            NC 0.040000000 0.150000000 0.200000008 0.200000000
##
            PD 0.940000000 0.700000000 0.349999974 0.250000000
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOG
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
            CR 0.000000000 0.000000000 0.400000000 0.450000000
##
            PR 0.200000000 0.300000000 0.150000000 0.200000000
##
            ##
            PD 0.800000000 0.700000000 0.450000000 0.350000000
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOL
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.000000000 0.400000000 0.450000000
##
            PR 0.000000000 0.300000000 0.150000000 0.200000000
##
            PD 1.000000000 0.700000000 0.450000000 0.350000000
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CL
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT NEXT RT
            CR 0.150000000 0.850000043 0.899999964 0.899999964
##
            PR 0.100000000 0.050000003 0.049999998 0.049999998
##
            NC 0.050000000 0.050000003 0.029999999 0.029999999
##
            PD 0.700000000 0.049999952 0.020000039 0.020000039
##
##
##
   , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICA
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                             CT CT_NEXT_RT
##
            CR 0.749999985 0.899999991 0.899999991 0.899999991
##
            PR 0.149999997 0.050000000 0.050000000 0.050000000
```

```
##
            PD 0.100000018 0.050000009 0.050000009 0.050000009
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGI
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.000000000 0.850000026 0.899999991 0.899999991
##
            PR 0.000000000 0.0500000002 0.050000000 0.0500000000
            ##
##
            PD 1.000000000 0.099999973 0.050000009 0.050000009
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_C
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.150000000 0.850000043 0.799999942 0.799999942
##
            PR 0.100000000 0.0500000003 0.0500000000 0.0500000000
##
            NC 0.050000000 0.050000003 0.030000000 0.030000000
##
            PD 0.700000000 0.049999952 0.120000059 0.120000059
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGIC
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.749999985 0.899999991 0.899999991 0.899999991
            PR 0.149999997 0.050000000 0.050000000 0.050000000
##
            ##
            PD 0.100000018 0.050000009 0.050000009 0.050000009
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOG
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                    NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.850000026 0.899999991 0.899999991
##
            PR 0.000000000 0.050000002 0.050000000 0.050000000
##
           PD 1.000000000 0.099999973 0.050000009 0.050000009
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT_NEXT_RT
            CR 0.100000000 0.700000021 0.800000040 0.850000043
##
            PR 0.050000000 0.100000003 0.100000005 0.050000003
##
           NC 0.050000000 0.100000003 0.050000003 0.050000003
##
            PD 0.800000000 0.099999973 0.049999952 0.049999952
##
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGI
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                             CT CT_NEXT_RT
##
            CR 0.649999968 0.800000024 0.800000024 0.850000026
##
           PR 0.149999993 0.100000003 0.100000003 0.050000002
```

```
##
            PD 0.200000040 0.099999973 0.099999973 0.099999973
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLO
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.000000000 0.700000000 0.800000024 0.850000026
##
            PR 0.000000000 0.100000000 0.100000003 0.050000002
            ##
##
            PD 1.000000000 0.200000000 0.099999973 0.099999973
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.100000000 0.700000021 0.700000014 0.750000015
##
            PR 0.050000000 0.100000003 0.100000002 0.050000001
##
            NC 0.050000000 0.100000003 0.050000001 0.050000001
##
            PD 0.800000000 0.099999973 0.149999983 0.149999983
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOG
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.649999968 0.800000024 0.800000024 0.850000026
            PR 0.149999993 0.100000003 0.100000003 0.050000002
##
            ##
            PD 0.200000040 0.099999973 0.099999973 0.099999973
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOL
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                    NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.700000000 0.800000024 0.850000026
##
            PR 0.000000000 0.100000000 0.100000003 0.050000002
##
            PD 1.000000000 0.200000000 0.099999973 0.099999973
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT_NEXT_RT
            CR 0.030000000 0.400000000 0.700000021 0.749999993
##
            PR 0.050000000 0.200000000 0.100000003 0.149999999
##
            NC 0.050000000 0.200000000 0.100000003 0.050000000
##
            PD 0.870000000 0.200000000 0.099999973 0.050000009
##
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGI
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                             CT CT_NEXT_RT
##
            CR 0.400000020 0.500000000 0.700000000 0.749999985
##
           PR 0.300000015 0.250000000 0.100000000 0.149999997
```

```
##
            PD 0.299999965 0.250000000 0.200000000 0.100000018
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLO
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.000000000 0.400000000 0.700000000 0.749999985
##
            PR 0.000000000 0.200000000 0.100000000 0.149999997
            ##
##
            PD 1.000000000 0.400000000 0.200000000 0.100000018
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.030000000 0.400000000 0.599999984 0.649999974
##
            PR 0.050000000 0.200000000 0.100000004 0.149999994
##
            NC 0.050000000 0.200000000 0.100000004 0.049999998
##
            PD 0.870000000 0.200000000 0.200000008 0.150000034
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOG
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.400000020 0.500000000 0.700000000 0.749999985
            PR 0.300000015 0.250000000 0.100000000 0.149999997
##
            ##
            PD 0.29999965 0.250000000 0.200000000 0.100000018
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOL
##
             CT_RT_SCHEDULE
##
## EARLY_RESULT
                   NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.400000000 0.700000000 0.749999985
##
            PR 0.000000000 0.200000000 0.100000000 0.149999997
##
            PD 1.000000000 0.400000000 0.200000000 0.100000018
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT NEXT RT
            CR 0.000000000 0.000000000 0.600000012 0.649999994
##
            PR 0.020000000 0.300000000 0.150000003 0.199999998
##
            NC 0.040000000 0.200000000 0.100000002 0.099999999
##
            PD 0.940000000 0.5000000000 0.149999983 0.050000009
##
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGI
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT_NEXT_RT
##
            CR 0.000000000 0.000000000 0.600000000 0.649999974
##
            PR 0.40000000 0.500000000 0.150000000 0.199999992
```

```
##
            PD 0.600000000 0.500000000 0.250000000 0.150000034
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLO
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.000000000 0.000000000 0.600000000 0.649999974
##
            PR 0.000000000 0.600000000 0.150000000 0.199999992
            ##
##
            PD 1.000000000 0.400000000 0.250000000 0.150000034
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.00000000 0.00000000 0.500000000 0.549999955
##
            PR 0.020000000 0.300000000 0.150000000 0.200000002
##
            NC 0.040000000 0.200000000 0.100000000 0.100000001
##
            PD 0.940000000 0.500000000 0.250000000 0.150000042
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOG
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
            CR 0.000000000 0.000000000 0.600000000 0.649999974
##
            PR 0.40000000 0.500000000 0.150000000 0.199999992
##
            ##
            PD 0.600000000 0.500000000 0.250000000 0.150000034
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOL
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                    NONE
                                             CT CT_NEXT_RT
                                  RT
            CR 0.000000000 0.000000000 0.600000000 0.649999974
##
            PR 0.000000000 0.600000000 0.150000000 0.199999992
##
            PD 1.000000000 0.400000000 0.250000000 0.150000034
##
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_C
##
##
             CT RT SCHEDULE
##
## EARLY RESULT
                    NONE
                                  R.T
                                             CT CT NEXT RT
            CR 0.000000000 0.000000000 0.600000012 0.649999994
##
            PR 0.020000000 0.300000000 0.150000003 0.199999998
##
            NC 0.040000000 0.200000000 0.100000002 0.099999999
##
            PD 0.940000000 0.5000000000 0.149999983 0.050000009
##
##
##
   , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGIC
##
             CT_RT_SCHEDULE
##
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT NEXT RT
##
            CR 0.000000000 0.000000000 0.600000000 0.649999974
##
            PR 0.40000000 0.500000000 0.150000000 0.199999992
```

```
##
           ##
           PD 0.600000000 0.500000000 0.250000000 0.150000034
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = NO, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOG
##
##
             CT RT SCHEDULE
##
                                             CT CT NEXT RT
## EARLY RESULT
                     NONE
                                 RT
##
           CR 0.000000000 0.000000000 0.600000000 0.649999974
##
           PR 0.000000000 0.600000000 0.150000000 0.199999992
           ##
##
           PD 1.000000000 0.400000000 0.250000000 0.150000034
##
  , , SURGERY = NONE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_
##
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                     NONE
                                  RT
                                             CT CT_NEXT_RT
           CR 0.00000000 0.00000000 0.500000000 0.549999955
##
           PR 0.020000000 0.300000000 0.150000000 0.200000002
##
           NC 0.040000000 0.200000000 0.100000000 0.100000001
##
           PD 0.940000000 0.500000000 0.250000000 0.150000042
##
##
  , , SURGERY = CURATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGI
##
##
             CT RT SCHEDULE
## EARLY RESULT
                     NONE
                                  RT
                                             CT CT_NEXT_RT
           CR 0.000000000 0.000000000 0.600000000 0.649999974
##
           PR 0.40000000 0.500000000 0.150000000 0.199999992
##
           ##
           PD 0.600000000 0.500000000 0.250000000 0.150000034
##
##
  , , SURGERY = PALLIATIVE, THERAPY_ADJUSTMENT = YES, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLO
##
##
             CT_RT_SCHEDULE
## EARLY_RESULT
                    NONE
                                             CT CT_NEXT_RT
                                 RT
           CR 0.000000000 0.000000000 0.600000000 0.649999974
##
           PR 0.000000000 0.600000000 0.150000000 0.199999992
##
##
           PD 1.000000000 0.400000000 0.250000000 0.150000034
##
##
##
    Parameters of node SURGERY (multinomial distribution)
##
##
## Conditional probability table:
        NONE
##
               CURATIVE PALLIATIVE
##
        0.70
                  0.25
                            0.05
##
##
    Parameters of node THERAPY_ADJUSTMENT (multinomial distribution)
##
## Conditional probability table:
##
  , , PERFORATION = NO, HEMORRHAGE = NO
##
##
##
                   BM DEPRESSION
## THERAPY ADJUSTMENT NO YES
```

```
NO 1.0 0.0
##
                  YES 0.0 1.0
##
##
## , , PERFORATION = YES, HEMORRHAGE = NO
##
##
                    BM DEPRESSION
## THERAPY_ADJUSTMENT NO YES
                  NO 0.0 0.0
##
##
                  YES 1.0 1.0
##
## , , PERFORATION = NO, HEMORRHAGE = YES
##
                    BM_DEPRESSION
##
## THERAPY_ADJUSTMENT NO YES
##
                  NO 0.5 0.0
##
                  YES 0.5 1.0
##
## , , PERFORATION = YES, HEMORRHAGE = YES
##
##
                    BM DEPRESSION
## THERAPY_ADJUSTMENT NO YES
                  NO 0.0 0.0
                  YES 1.0 1.0
##
##
##
##
    Parameters of node CT_RT_SCHEDULE (multinomial distribution)
##
## Conditional probability table:
         NONE
                                  CT CT_NEXT_RT
##
                     RT
         0.15
                    0.35
                               0.25
                                         0.25
##
##
##
    Parameters of node POST_CT_RT_SURVIVAL (multinomial distribution)
##
## Conditional probability table:
## , , HEMORRHAGE = NO
##
##
                      PERFORATION
## POST_CT_RT_SURVIVAL NO YES
##
                  NO 0.00 0.20
##
                   YES 1.00 0.80
##
## , , HEMORRHAGE = YES
##
                      PERFORATION
## POST_CT_RT_SURVIVAL NO YES
                   NO 0.10 0.25
##
##
                   YES 0.90 0.75
##
##
##
    Parameters of node HISTOLOGICAL_CLASSIFICATION (multinomial distribution)
## Conditional probability table:
##
```

```
##
                              AGE
## HISTOLOGICAL_CLASSIFICATION v10_19 v20_29 v30_39 v40_44 v45_49 v50_54
##
                    LOW GRADE
                                  0.4
                                          0.4
                                                 0.6
                                                        0.7
                                                                0.6
                    HIGH_GRADE
                                          0.6
                                                 0.4
                                                        0.3
                                                                0.4
                                                                       0.4
##
                                   0.6
##
                              AGE
## HISTOLOGICAL CLASSIFICATION v55 59 v60 64 v65 69 v70 79 v80 89 vGE90
                                   0.6
                                          0.4
                                                 0.4
                                                        0.3
                                                                0.3
##
                    LOW GRADE
                    HIGH GRADE
                                          0.6
                                                 0.6
                                                        0.7
                                                                0.7
                                                                      0.7
##
                                  0.4
##
     Parameters of node ERADICATION (multinomial distribution)
##
##
  Conditional probability table:
##
##
   , , HELICOBACTER_PYLORI = ABSENT
##
##
              HELICOBACTER_TREATMENT
## ERADICATION NO YES
          NO
               0
           YES 1
##
                    1
##
##
   , , HELICOBACTER_PYLORI = PRESENT
##
              HELICOBACTER_TREATMENT
## ERADICATION NO YES
##
           NO
               1
##
           YES 0
##
##
     Parameters of node HEMORRHAGE (multinomial distribution)
##
##
##
  Conditional probability table:
##
##
             CT_RT_SCHEDULE
  HEMORRHAGE
                                             CT CT_NEXT_RT
##
                    NONE
                                 RT
##
          NO 0.97999999 0.95000000 0.93000003 0.87999996
          YES 0.02000001 0.05000000 0.06999997 0.12000004
##
##
##
    Parameters of node BULKY_DISEASE (multinomial distribution)
##
## Conditional probability table:
##
   , , HISTOLOGICAL_CLASSIFICATION = LOW_GRADE, CLINICAL_STAGE = I
##
                AGE
##
                                v20_29
                                            v30_39
## BULKY_DISEASE
                     v10_19
                                                       v40_44
             YES 0.40000000 0.29999999 0.20000000 0.10000000 0.10000000
##
             ND 0.60000000 0.70000001 0.80000000 0.90000000 0.90000000
##
                AGE
##
## BULKY_DISEASE
                     v50_54
                                v55_59
                                            v60_64
                                                       v65_69
                                                                  v70_79
             YES 0.10000000 0.10000000 0.20000000 0.24999999 0.29999999
##
             NO 0.90000000 0.90000000 0.80000000 0.75000001 0.70000001
##
##
## BULKY_DISEASE
                     v80 89
                                 vGE90
##
             YES 0.29999999 0.29999999
```

```
##
             NO 0.70000001 0.70000001
##
##
   , , HISTOLOGICAL CLASSIFICATION = HIGH GRADE, CLINICAL STAGE = I
##
##
                AGE
## BULKY DISEASE
                     v10 19
                                v20 29
                                            v30 39
                                                       v40 44
                                                                  v45 49
             YES 0.70000000 0.50000000 0.34999999 0.25000000 0.20000000
##
             NO 0.30000000 0.50000000 0.65000001 0.75000000 0.80000000
##
##
                AGE
## BULKY_DISEASE
                     v50_54
                                v55_59
                                            v60_64
                                                       v65_69
##
             YES 0.20000000 0.20000000 0.25000000 0.25000000 0.25000000
             ND 0.80000000 0.80000000 0.75000000 0.75000000 0.75000000
##
##
                     v80_89
## BULKY_DISEASE
                                 vGE90
             YES 0.30000000 0.30000000
##
##
             NO 0.70000000 0.70000000
##
   , , HISTOLOGICAL_CLASSIFICATION = LOW_GRADE, CLINICAL_STAGE = II1
##
##
                AGE
## BULKY_DISEASE
                     v10_19
                                v20_29
                                            v30_39
                                                       v40 44
                                                                  v45 49
             YES 0.29999999 0.29999999 0.24999999 0.20000000 0.20000000
##
             ND 0.70000001 0.70000001 0.75000001 0.80000000 0.80000000
##
##
## BULKY DISEASE
                     v50 54
                                v55 59
                                            v60 64
                                                       v65 69
                                                                  v70 79
##
             YES 0.20000000 0.20000000 0.24999999 0.29999999 0.34999999
##
             NO 0.80000000 0.80000000 0.75000001 0.70000001 0.65000001
##
                AGE
                                 vGE90
## BULKY_DISEASE
                     v80_89
##
             YES 0.34999999 0.34999999
##
             NO 0.65000001 0.65000001
##
##
   , , HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE, CLINICAL_STAGE = II1
##
                AGE
##
                                v20 29
                                           v30 39
                                                       v40 44
                                                                  v45_49
## BULKY DISEASE
                     v10 19
             YES 0.69999997 0.55000000 0.34999999 0.29999999 0.24999999
##
             NO 0.30000003 0.45000000 0.65000001 0.70000001 0.75000001
##
                AGE
##
## BULKY_DISEASE
                     v50_54
                                v55_59
                                            v60_64
                                                       v65_69
             YES 0.24999999 0.24999999 0.29999999 0.34999999 0.34999999
##
             NO 0.75000001 0.75000001 0.70000001 0.65000001 0.65000001
##
##
                AGE
## BULKY_DISEASE
                     v80_89
                                 vGE90
             YES 0.40000000 0.40000000
##
             NO 0.60000000 0.60000000
##
##
##
   , , HISTOLOGICAL_CLASSIFICATION = LOW_GRADE, CLINICAL_STAGE = II2
##
##
                AGE
## BULKY_DISEASE
                                            v30_39
                     v10_19
                                v20_29
                                                       v40_44
                                                                  v45_49
##
             YES 0.34999999 0.34999999 0.50000000 0.50000000 0.50000000
##
             ND 0.65000001 0.65000001 0.50000000 0.50000000 0.50000000
##
                AGE
```

```
## BULKY DISEASE
                  v50 54
                              v55 59 v60 64
                                                    v65 69
##
             YES 0.50000000 0.55000000 0.55000000 0.60000000 0.64999997
##
             ND 0.50000000 0.45000000 0.45000000 0.40000000 0.35000003
##
                AGF.
## BULKY DISEASE
                    v80 89
                                 vGE90
##
            YES 0.69999997 0.69999997
            NO 0.30000003 0.30000003
##
##
##
   , , HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE, CLINICAL_STAGE = II2
##
##
                AGE
## BULKY DISEASE
                    v10_19
                               v20_29
                                           v30_39
                                                      v40_44
                                                                 v45 49
##
             YES 0.74999998 0.75000000 0.60000000 0.55000000 0.55000000
             ND 0.25000002 0.25000000 0.40000000 0.45000000 0.45000000
##
##
## BULKY_DISEASE
                     v50_54
                              v55_59
                                           v60_64
                                                      v65_69
                                                                 v70_79
             YES 0.50000000 0.50000000 0.55000000 0.55000000 0.64999997
##
             ND 0.50000000 0.50000000 0.45000000 0.45000000 0.35000003
##
               AGE
##
## BULKY DISEASE
                     v80 89
                                 vGE90
##
             YES 0.69999997 0.69999997
             NO 0.30000003 0.30000003
##
##
   , , HISTOLOGICAL_CLASSIFICATION = LOW_GRADE, CLINICAL_STAGE = III
##
##
##
                AGF.
## BULKY_DISEASE
                               v20_29
                                           v30_39
                                                      v40_44
                    v10_19
                                                                 v45_49
             YES 0.25000000 0.15000000 0.05000001 0.05000001 0.05000001
##
             NO 0.75000000 0.85000000 0.94999999 0.94999999 0.94999999
##
##
                AGE
## BULKY_DISEASE
                     v50_54
                               v55_59
                                           v60_64
                                                      v65 69
##
             YES 0.05000001 0.05000001 0.10000000 0.20000000 0.30000000
             NO 0.94999999 0.94999999 0.90000000 0.80000000 0.70000000
##
##
                AGE
## BULKY DISEASE
                    v80 89
                                vGE90
             YES 0.40000000 0.40000000
##
##
             ND 0.60000000 0.60000000
##
   , , HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE, CLINICAL_STAGE = III
##
##
##
                AGE
## BULKY DISEASE
                    v10_19
                               v20_29
                                           v30 39
                                                      v40 44
             YES 0.60000000 0.60000000 0.50000000 0.40000000 0.40000000
##
             NO 0.40000000 0.40000000 0.50000000 0.60000000 0.60000000
##
##
## BULKY_DISEASE
                     v50_54
                                v55_59
                                           v60_64
                                                      v65_69
                                                                 v70_79
             YES 0.40000000 0.40000000 0.50000000 0.60000000 0.69999997
##
             ND 0.60000000 0.60000000 0.50000000 0.40000000 0.30000003
##
                AGE.
## BULKY_DISEASE
                     v80_89
                                 vGE90
             YES 0.69999997 0.69999997
##
##
             NO 0.30000003 0.30000003
##
## , , HISTOLOGICAL_CLASSIFICATION = LOW_GRADE, CLINICAL_STAGE = IV
```

```
##
##
                AGF.
## BULKY DISEASE
                                v20 29
                     v10 19
                                           v30 39
                                                       v40 44
             YES 0.25000000 0.15000000 0.05000001 0.05000001 0.05000001
##
##
             NO 0.75000000 0.85000000 0.94999999 0.94999999 0.94999999
                AGE
##
## BULKY DISEASE
                     v50 54
                               v55 59
                                            v60 64
                                                       v65 69
##
             YES 0.05000001 0.05000001 0.10000000 0.20000000 0.30000000
##
             ND 0.94999999 0.94999999 0.90000000 0.80000000 0.70000000
                AGE
##
## BULKY_DISEASE
                     v80_89
                                 vGE90
             YES 0.40000000 0.40000000
##
             NO 0.60000000 0.60000000
##
##
   , , HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE, CLINICAL_STAGE = IV
##
##
                AGE
##
## BULKY_DISEASE
                     v10 19
                                v20 29
                                            v30 39
                                                       v40 44
                                                                  v45 49
             YES 0.60000000 0.60000000 0.50000000 0.40000000 0.40000000
##
             NO 0.40000000 0.40000000 0.50000000 0.60000000 0.60000000
##
##
                AGE
## BULKY_DISEASE
                     v50 54
                                v55 59
                                            v60 64
                                                       v65 69
             YES 0.40000000 0.40000000 0.50000000 0.60000000 0.69999997
##
             ND 0.60000000 0.60000000 0.50000000 0.40000000 0.30000003
##
                AGE
##
## BULKY DISEASE
                     v80_89
                                 vGE90
             YES 0.69999997 0.70000000
##
             NO 0.30000003 0.30000000
##
##
##
##
     Parameters of node PERFORATION (multinomial distribution)
##
##
  Conditional probability table:
##
##
              CT RT SCHEDULE
## PERFORATION
                     NONE
                                  RT
                                              CT CT NEXT RT
##
           NO 0.99000000 0.97000004 0.95000001 0.91999999
##
           YES 0.01000000 0.02999996 0.04999999 0.08000001
##
     Parameters of node IMMEDIATE_SURVIVAL (multinomial distribution)
##
##
  Conditional probability table:
##
##
   , , POST_SURGICAL_SURVIVAL = NO
##
##
##
                     POST_CT_RT_SURVIVAL
##
  IMMEDIATE_SURVIVAL NO YES
##
                  NO
##
                  YES 0
                           0
##
   , , POST_SURGICAL_SURVIVAL = YES
##
##
##
                     POST_CT_RT_SURVIVAL
## IMMEDIATE SURVIVAL NO YES
```

```
##
               NO
                      0
               YES
##
##
##
##
    Parameters of node GENERAL_HEALTH_STATUS (multinomial distribution)
##
##
  Conditional probability table:
##
##
                    AGE
##
  GENERAL_HEALTH_STATUS
                        v10_19
                                 v20_29
                                           v30_39
                                                    v40_44
##
              POOR
                     0.00200000 0.00500000 0.01000000 0.01000000
              AVERAGE 0.00800000 0.01000000 0.01000000 0.02000000
##
                     0.99000000 0.98500000 0.98000000 0.97000000
##
##
                    AGE
##
  GENERAL_HEALTH_STATUS
                        v45_49
                                 v50_54
                                           v55_59
                                                    v60_64
##
                     0.03000000 0.04000000 0.05000000 0.10000000
              AVERAGE 0.07000000 0.08000000 0.10000000 0.20000000
##
##
                     0.90000000 0.88000000 0.85000000 0.70000000
##
                    AGE
##
  GENERAL HEALTH STATUS
                        v65 69
                                 v70 79
                                           v80 89
              POOR
##
                     0.15000000 0.20000001 0.39999999 0.60000001
              AVERAGE 0.25000000 0.50000003 0.49999999 0.30000000
##
                     0.60000000 0.29999996 0.10000002 0.09999999
##
              GOOD
##
##
    Parameters of node FIVE_YEAR_RESULT (multinomial distribution)
##
  Conditional probability table:
##
##
  , , AGE = v10_19, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
##
                EARLY_RESULT
  FIVE_YEAR_RESULT
                       CR
                                 PR
                                          NC
                                                   PD
           ##
           ##
##
  , , AGE = v20_29, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                EARLY_RESULT
##
                       CR
                                          NC
                                                   PD
## FIVE_YEAR_RESULT
                                PR
           ##
           ##
##
##
   , AGE = v30_39, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                EARLY_RESULT
                       CR
                                 PR
                                          NC
                                                   PD
## FIVE_YEAR_RESULT
           ##
           ##
##
##
  , , AGE = v40_44, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                EARLY_RESULT
## FIVE_YEAR_RESULT
                       CR
                                PR.
                                          NC
                                                   PD
           ##
```

```
##
        ##
##
 , , AGE = v45 49, CLINICAL STAGE = I, BULKY DISEASE = YES, HISTOLOGICAL CLASSIFICATION = LOW GRADE,
##
##
           EARLY RESULT
## FIVE YEAR RESULT
                 CR
                        PR
        ##
        ##
##
 , , AGE = v50_54, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
           EARLY_RESULT
##
## FIVE_YEAR_RESULT
                 CR.
                        PR.
        ##
        ##
 , , AGE = v55_59, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
##
           EARLY RESULT
## FIVE YEAR RESULT
##
        ##
##
 , , AGE = v60_64, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
           EARLY RESULT
## FIVE_YEAR_RESULT
                        PR
                 CR.
        ##
        ##
##
##
 , , AGE = v65_69, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                        PR
                 CR.
        ##
        ##
 , , AGE = v70_79, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
           EARLY_RESULT
##
## FIVE YEAR RESULT
        ##
        ##
##
 , , AGE = v80_89, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                 CR
                        PR
                               NC
                                      PD
##
        ##
        ##
 , , AGE = vGE90, CLINICAL STAGE = I, BULKY DISEASE = YES, HISTOLOGICAL CLASSIFICATION = LOW GRADE, I
##
```

EARLY RESULT

##

```
## FIVE_YEAR_RESULT
                CR
                   PR NC
        ##
##
        ##
##
 , , AGE = v10_19, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
           EARLY RESULT
## FIVE YEAR RESULT
                 CR
                       PR
        ##
        ##
##
 , , AGE = v20_29, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                 CR
                       PR
        ##
##
 , , AGE = v30_39, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
##
           EARLY_RESULT
## FIVE YEAR RESULT
        ##
        ##
##
 , , AGE = v40_44, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
           EARLY_RESULT
                       PR
                              NC
## FIVE_YEAR_RESULT
                 CR
        ##
        ##
 , , AGE = v45_49, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
           EARLY RESULT
## FIVE_YEAR_RESULT
                 CR.
                       PR.
        ##
##
 , , AGE = v50_54, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
           EARLY RESULT
##
## FIVE YEAR RESULT
                 CR
                       PR
        ##
        ##
##
 , , AGE = v55_59, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                       PR
                              NC
        ##
        ##
##
## , , AGE = v60 64, CLINICAL STAGE = II1, BULKY DISEASE = YES, HISTOLOGICAL CLASSIFICATION = LOW GRADE
```

```
##
           EARLY_RESULT
##
## FIVE YEAR RESULT
                CR.
        ##
##
        ##
 , , AGE = v65 69, CLINICAL STAGE = II1, BULKY DISEASE = YES, HISTOLOGICAL CLASSIFICATION = LOW GRADE
##
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                CR
                       PR
        ##
##
 , , AGE = v70_79, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
           EARLY_RESULT
                             NC
## FIVE_YEAR_RESULT
                CR
                       PR
        ##
##
##
 , , AGE = v80_89, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
           EARLY_RESULT
## FIVE YEAR RESULT
                       PR
        ##
        ##
 , , AGE = vGE90, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                       PR
##
        ##
##
 , , AGE = v10_19, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
           EARLY RESULT
## FIVE_YEAR_RESULT
                CR.
                       PR.
        ##
        ##
 , , AGE = v20_29, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
           EARLY_RESULT
##
## FIVE_YEAR_RESULT
                CR
        ##
        ##
##
##
 , , AGE = v30_39, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
           EARLY_RESULT
##
## FIVE YEAR RESULT
                CR
                       PR
##
        ##
```

```
##
 , , AGE = v40_44, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
            EARLY_RESULT
##
## FIVE YEAR RESULT
                  CR
                         PR
         ##
         ##
##
##
  , , AGE = v45_49, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
            EARLY_RESULT
## FIVE_YEAR_RESULT
                  CR
                         PR
                                NC
         ##
##
  , , AGE = v50_54, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
            EARLY RESULT
##
## FIVE YEAR RESULT
                  CR
                         PR
         ##
         ##
 , , AGE = v55_59, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
            EARLY_RESULT
## FIVE_YEAR_RESULT
                  CR.
                         PR
         ##
         ##
##
  , , AGE = v60_64, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
            EARLY_RESULT
                         PR
                                NC
         ##
         ##
##
 , , AGE = v65 69, CLINICAL STAGE = II2, BULKY DISEASE = YES, HISTOLOGICAL CLASSIFICATION = LOW GRADE
##
            EARLY RESULT
##
## FIVE_YEAR_RESULT
                  CR
                         PR
         ##
##
  , , AGE = v70_79, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
            EARLY_RESULT
##
## FIVE YEAR RESULT
                  CR.
                         PR
         ##
##
##
 , , AGE = v80_89, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
            EARLY RESULT
## FIVE YEAR RESULT
                         PR
                                NC
                                       PD
```

```
##
        ##
        ##
 , , AGE = vGE90, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
           EARLY RESULT
##
## FIVE YEAR RESULT
                               NC
##
        ##
        ##
##
  , , AGE = v10_19, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
           EARLY RESULT
## FIVE_YEAR_RESULT
                 CR
                        PR
                               NC
                                      PΠ
        ##
##
        ##
 , , AGE = v20_29, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
           EARLY RESULT
## FIVE YEAR RESULT
                 CR.
                        PR.
                               NC.
                                      PΠ
        ##
        ##
##
 , , AGE = v30 39, CLINICAL STAGE = III, BULKY DISEASE = YES, HISTOLOGICAL CLASSIFICATION = LOW GRADE
##
##
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                 CR
                        PR
        ##
        ##
##
 , , AGE = v40_44, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
           EARLY_RESULT
##
## FIVE YEAR RESULT
                        PR.
        ##
##
        ##
 , , AGE = v45_49, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
##
           EARLY RESULT
## FIVE YEAR RESULT
                 CR.
                        PR.
        ##
        ##
 , , AGE = v50_54, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                 CR
                        PR.
##
        ##
##
## , , AGE = v55_59, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
```

```
##
           EARLY RESULT
                               NC
                                     PD
## FIVE_YEAR_RESULT
                 CR
                        PR
##
        ##
##
 , , AGE = v60 64, CLINICAL STAGE = III, BULKY DISEASE = YES, HISTOLOGICAL CLASSIFICATION = LOW GRADE
##
##
##
           EARLY RESULT
## FIVE_YEAR_RESULT
                 CR
                        PR
                               NC
                                     חק
        ##
##
        ##
 , , AGE = v65_69, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
           EARLY_RESULT
##
## FIVE_YEAR_RESULT
                 CR
                        PR
                               NC
                                     PD
        ##
##
        ##
 , , AGE = v70 79, CLINICAL STAGE = III, BULKY DISEASE = YES, HISTOLOGICAL CLASSIFICATION = LOW GRADE
##
           EARLY RESULT
##
                               NC
                                     PD
## FIVE_YEAR_RESULT
                 CR
                        PR
        ##
        ##
##
 , , AGE = v80_89, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
           EARLY_RESULT
##
## FIVE_YEAR_RESULT
                 CR
                        PR
                               NC
                                     PD
##
        ##
        ##
  , AGE = vGE90, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
           EARLY RESULT
##
## FIVE YEAR RESULT
                        PR
                               NC
                                     PD
        ##
        ##
##
  , , AGE = v10 19, CLINICAL STAGE = IV, BULKY DISEASE = YES, HISTOLOGICAL CLASSIFICATION = LOW GRADE,
##
##
##
           EARLY RESULT
                                     PD
## FIVE_YEAR_RESULT
                        PR
                               NC.
                 CR.
        ##
        ##
##
 , , AGE = v20_29, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
           EARLY_RESULT
                                     PD
## FIVE_YEAR_RESULT
                 CR
                        PR
                               NC.
        ##
##
```

```
, , AGE = v30_39, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
            EARLY RESULT
## FIVE_YEAR_RESULT
                  CR
                         PR
##
         ##
##
  , , AGE = v40_44, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
##
            EARLY_RESULT
 FIVE_YEAR_RESULT
                  CR
                         PR
                                NC
                                        PD
         ##
         ##
##
  , , AGE = v45_49, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
##
            EARLY_RESULT
 FIVE_YEAR_RESULT
                         PR
                                NC
                                        PD
                  CR.
         ##
##
         ##
 , , AGE = v50_54, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
            EARLY RESULT
## FIVE YEAR RESULT
                  CR.
                         PR.
                                NC
                                        PD
##
         ##
         , , AGE = v55_59, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
            EARLY_RESULT
## FIVE_YEAR_RESULT
                  CR
                         PR
                                NC
                                        PD
##
         ##
  , , AGE = v60_64, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
            EARLY_RESULT
##
                                        PD
## FIVE_YEAR_RESULT
                  CR.
                         PR
                                NC
         ##
         ##
##
  , , AGE = v65_69, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
##
            EARLY_RESULT
                                NC
                                        PD
## FIVE_YEAR_RESULT
                  CR
                         PR
         ##
         ##
##
  , , AGE = v70_79, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
##
            EARLY RESULT
## FIVE_YEAR_RESULT
                  CR
                         PR.
                                NC
                                       PD
##
```

```
##
        ##
  , , AGE = v80 89, CLINICAL STAGE = IV, BULKY DISEASE = YES, HISTOLOGICAL CLASSIFICATION = LOW GRADE,
##
##
##
           EARLY RESULT
                               NC
## FIVE YEAR RESULT
                 CR
                        PR
        ##
        ##
##
 , , AGE = vGE90, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
            EARLY_RESULT
##
## FIVE_YEAR_RESULT
                 CR.
                        PR.
        ##
        ##
##
  , , AGE = v10_19, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE, I
##
##
##
           EARLY RESULT
## FIVE YEAR RESULT
                        PR
##
        ##
##
 , , AGE = v20_29, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE, I
##
##
            EARLY RESULT
## FIVE_YEAR_RESULT
                        PR
                 CR.
        ##
        ##
##
  , , AGE = v30_39, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE, I
##
##
            EARLY_RESULT
## FIVE_YEAR_RESULT
                        PR
                 CR.
        ##
        ##
 , , AGE = v40_44, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE, I
##
##
            EARLY_RESULT
##
## FIVE YEAR RESULT
        ##
        ##
##
 , , AGE = v45_49, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE, I
##
##
            EARLY RESULT
## FIVE_YEAR_RESULT
                 CR
                        PR
                               NC
                                      PD
##
        ##
        ##
 , , AGE = v50 54, CLINICAL STAGE = I, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = LOW GRADE, I
##
##
            EARLY RESULT
```

```
## FIVE_YEAR_RESULT
                CR
                   PR
        ##
##
        ##
##
 , , AGE = v55_59, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE, I
##
##
           EARLY RESULT
## FIVE YEAR RESULT
                 CR
                       PR
        ##
        ##
##
 , , AGE = v60_64, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE, I
##
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                 CR
                       PR
##
        ##
##
 , , AGE = v65_69, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE, I
##
##
##
           EARLY_RESULT
## FIVE YEAR RESULT
        ##
        ##
##
 , , AGE = v70_79, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE, I
##
##
           EARLY_RESULT
                       PR
                              NC
## FIVE_YEAR_RESULT
                 CR
        ##
        ##
 , , AGE = v80_89, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE, I
##
           EARLY RESULT
## FIVE_YEAR_RESULT
                 CR.
                       PR.
        ##
##
 , , AGE = vGE90, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE, IM
##
           EARLY RESULT
##
## FIVE YEAR RESULT
                 CR
                       PR
        ##
        ##
 , , AGE = v10_19, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                       PR
                              NC
        ##
        ##
##
## , , AGE = v20 29, CLINICAL STAGE = II1, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = LOW GRADE,
```

```
##
           EARLY_RESULT
##
## FIVE YEAR RESULT
                CR.
        ##
##
        ##
 , , AGE = v30 39, CLINICAL STAGE = II1, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = LOW GRADE,
##
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                CR
                       PR
        ##
##
 , , AGE = v40_44, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
           EARLY_RESULT
                              NC
## FIVE_YEAR_RESULT
                CR
                       PR
        ##
##
##
 , , AGE = v45_49, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
           EARLY_RESULT
## FIVE YEAR RESULT
                       PR
        ##
        ##
 , , AGE = v50_54, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                       PR
##
        ##
##
 , , AGE = v55_59, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
           EARLY RESULT
## FIVE_YEAR_RESULT
                CR.
                       PR.
        ##
        ##
##
 , , AGE = v60_64, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
           EARLY_RESULT
##
## FIVE_YEAR_RESULT
                CR
        ##
        ##
##
##
 , , AGE = v65_69, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
           EARLY_RESULT
##
## FIVE YEAR RESULT
                CR
                       PR
##
        ##
```

```
##
 , , AGE = v70_79, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
            EARLY_RESULT
##
## FIVE YEAR RESULT
                         PR
         ##
         ##
##
##
  , , AGE = v80_89, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
            EARLY_RESULT
## FIVE_YEAR_RESULT
                  CR
                         PR
                                NC
         ##
##
  , , AGE = vGE90, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
            EARLY RESULT
##
## FIVE YEAR RESULT
                  CR
                         PR
         ##
        ##
 , , AGE = v10_19, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
            EARLY RESULT
## FIVE YEAR RESULT
                  CR.
                         PR
         ##
         ##
##
 , , AGE = v20_29, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
            EARLY_RESULT
                         PR
                                NC
         ##
         ##
##
 , , AGE = v30 39, CLINICAL STAGE = II2, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = LOW GRADE,
##
            EARLY RESULT
##
## FIVE_YEAR_RESULT
                  CR
                         PR
         ##
##
  , , AGE = v40_44, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
            EARLY_RESULT
##
## FIVE YEAR RESULT
                  CR.
                         PR
         ##
##
##
 , , AGE = v45_49, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
            EARLY RESULT
## FIVE YEAR RESULT
                         PR
                                NC
                                       PD
```

```
##
        ##
        ##
 , , AGE = v50_54, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
           EARLY RESULT
##
## FIVE YEAR RESULT
                 CR
                               NC
##
        ##
        ##
##
 , , AGE = v55_59, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
           EARLY RESULT
## FIVE_YEAR_RESULT
                 CR
                        PR
                               NC
                                      PΠ
        ##
##
        ##
 , , AGE = v60_64, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
           EARLY RESULT
## FIVE YEAR RESULT
                 CR.
                        PR.
                               NC.
                                      PΠ
        ##
        ##
##
 , , AGE = v65 69, CLINICAL STAGE = II2, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = LOW GRADE,
##
##
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                 CR
                        PR
        ##
        ##
##
##
 , , AGE = v70_79, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
           EARLY_RESULT
##
## FIVE YEAR RESULT
                        PR.
        ##
##
        ##
 , , AGE = v80_89, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
##
           EARLY RESULT
## FIVE YEAR RESULT
                 CR.
                        PR.
        ##
##
        , , AGE = vGE90, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                 CR
                        PR.
##
        ##
##
## , , AGE = v10_19, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
```

```
##
           EARLY RESULT
                               NC
                                      PD
## FIVE_YEAR_RESULT
                 CR.
                        PR.
##
        ##
##
 , , AGE = v20 29, CLINICAL STAGE = III, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = LOW GRADE,
##
##
##
           EARLY RESULT
## FIVE_YEAR_RESULT
                 CR
                        PR
                               NC
                                      חק
        ##
##
        ##
 , , AGE = v30_39, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
           EARLY_RESULT
##
## FIVE_YEAR_RESULT
                 CR
                        PR
                               NC
                                      PD
        ##
##
        ##
 , , AGE = v40 44, CLINICAL STAGE = III, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = LOW GRADE,
##
           EARLY RESULT
##
                               NC
                                      PD
## FIVE_YEAR_RESULT
                 CR
                        PR
        ##
        ##
##
 , , AGE = v45_49, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
           EARLY_RESULT
##
## FIVE_YEAR_RESULT
                 CR
                        PR
                               NC
                                      PD
##
        ##
        ##
  , AGE = v50_54, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
           EARLY RESULT
##
## FIVE YEAR RESULT
                        PR
                               NC
                                      PD
        ##
        ##
##
  , , AGE = v55 59, CLINICAL STAGE = III, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = LOW GRADE,
##
##
##
           EARLY RESULT
                                      PD
 FIVE_YEAR_RESULT
                        PR
                               NC.
                 CR.
        ##
        ##
##
 , , AGE = v60_64, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
##
           EARLY_RESULT
                                      PD
## FIVE_YEAR_RESULT
                 CR
                        PR.
                               NC.
        ##
##
```

```
, , AGE = v65_69, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
            EARLY RESULT
                                NC
## FIVE_YEAR_RESULT
                  CR
                         PR
##
         ##
##
  , , AGE = v70_79, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
##
            EARLY_RESULT
 FIVE_YEAR_RESULT
                  CR
                         PR
                                NC
                                       PD
         ##
##
         ##
  , , AGE = v80_89, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
            EARLY_RESULT
##
## FIVE_YEAR_RESULT
                                NC
                                       PD
                  CR.
         ##
##
         ##
 , , AGE = vGE90, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
            EARLY RESULT
## FIVE YEAR RESULT
                  CR.
                         PR.
                                NC
                                       PD
##
         ##
         , , AGE = v10_19, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
            EARLY_RESULT
## FIVE_YEAR_RESULT
                  CR
                         PR
                                NC
                                       PD
##
         ##
  , , AGE = v20_29, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
            EARLY_RESULT
##
                                       PD
## FIVE_YEAR_RESULT
                         PR
         ##
         ##
##
##
  , , AGE = v30_39, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
            EARLY_RESULT
                                NC
                                       PD
## FIVE_YEAR_RESULT
                  CR
                         PR
##
         ##
##
  , , AGE = v40_44, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
##
            EARLY RESULT
## FIVE_YEAR_RESULT
                  CR
                         PR
                                NC
                                       PD
```

```
##
        ##
##
 , , AGE = v45 49, CLINICAL STAGE = IV, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = LOW GRADE,
##
##
           EARLY RESULT
## FIVE YEAR RESULT
                 CR
                        PR
        ##
        ##
##
 , , AGE = v50_54, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
           EARLY_RESULT
##
## FIVE_YEAR_RESULT
                 CR.
                        PR.
        ##
        ##
 , , AGE = v55_59, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
##
           EARLY RESULT
## FIVE YEAR RESULT
                        PR
##
        ##
##
 , , AGE = v60_64, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
           EARLY RESULT
## FIVE_YEAR_RESULT
                        PR
                 CR.
        ##
        ##
##
##
 , , AGE = v65_69, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                        PR
                 CR.
        ##
        ##
 , , AGE = v70_79, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
           EARLY_RESULT
##
## FIVE YEAR RESULT
        ##
        ##
##
 , , AGE = v80_89, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                 CR
                        PR
                               NC
                                      PD
##
        ##
        ##
 , , AGE = vGE90, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE, I
##
```

```
## FIVE YEAR RESULT
                CR
                   PR NC
        ##
##
        ##
##
 , , AGE = v10_19, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
           EARLY RESULT
## FIVE YEAR RESULT
                 CR
                       PR
        ##
##
 , , AGE = v20_29, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                CR
                       PR
##
        ##
##
 , , AGE = v30_39, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
##
           EARLY_RESULT
## FIVE YEAR RESULT
        ##
        ##
##
 , , AGE = v40_44, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
           EARLY_RESULT
                       PR
                              NC
## FIVE_YEAR_RESULT
                CR
        ##
        ##
 , , AGE = v45_49, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
           EARLY RESULT
## FIVE_YEAR_RESULT
                CR.
                       PR.
        ##
 , , AGE = v50_54, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
           EARLY RESULT
##
## FIVE YEAR RESULT
                CR
                       PR
        ##
        ##
 , , AGE = v55_59, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                       PR
        ##
        ##
##
## , , AGE = v60 64, CLINICAL STAGE = I, BULKY DISEASE = YES, HISTOLOGICAL CLASSIFICATION = HIGH GRADE,
```

```
##
##
           EARLY_RESULT
## FIVE YEAR RESULT
                CR.
        ##
        ##
 , , AGE = v65 69, CLINICAL STAGE = I, BULKY DISEASE = YES, HISTOLOGICAL CLASSIFICATION = HIGH GRADE,
##
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                CR
                       PR
        ##
##
 , , AGE = v70_79, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
           EARLY_RESULT
                             NC
## FIVE_YEAR_RESULT
                CR
                       PR
        ##
##
##
 , , AGE = v80_89, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
           EARLY RESULT
## FIVE YEAR RESULT
                       PR
        ##
        ##
 , , AGE = vGE90, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                       PR
##
        ##
##
 , , AGE = v10_19, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
           EARLY RESULT
## FIVE_YEAR_RESULT
                CR.
                       PR.
        ##
        ##
##
 , , AGE = v20_29, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                CR
        ##
        ##
##
##
 , , AGE = v30_39, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
           EARLY_RESULT
##
## FIVE YEAR RESULT
                CR
                       PR
##
        ##
```

```
##
 , , AGE = v40_44, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
            EARLY_RESULT
##
## FIVE YEAR RESULT
                  CR
                         PR
         ##
         ##
##
  , , AGE = v45_49, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
##
            EARLY_RESULT
## FIVE_YEAR_RESULT
                  CR
                         PR
                                NC
         ##
##
  , , AGE = v50_54, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
            EARLY RESULT
##
## FIVE YEAR RESULT
                  CR
                         PR
         ##
         ##
 , , AGE = v55_59, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
            EARLY_RESULT
## FIVE_YEAR_RESULT
                  CR.
                         PR.
         ##
         ##
##
  , , AGE = v60_64, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
            EARLY_RESULT
                         PR
                                NC
         ##
         ##
##
 , , AGE = v65 69, CLINICAL STAGE = II1, BULKY DISEASE = YES, HISTOLOGICAL CLASSIFICATION = HIGH GRAD
##
            EARLY RESULT
##
## FIVE_YEAR_RESULT
                  CR
                         PR
         ##
##
  , , AGE = v70_79, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
            EARLY_RESULT
## FIVE YEAR RESULT
                  CR.
                         PR
         ##
         ##
 , , AGE = v80_89, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
            EARLY RESULT
## FIVE YEAR RESULT
                         PR
                                NC
                                       PD
```

```
##
        ##
        ##
 , , AGE = vGE90, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
           EARLY RESULT
##
## FIVE YEAR RESULT
##
        ##
        ##
  , , AGE = v10_19, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
           EARLY RESULT
## FIVE_YEAR_RESULT
                 CR
                        PR
                               NC
                                     PΠ
        ##
##
        ##
 , , AGE = v20_29, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
           EARLY RESULT
## FIVE YEAR RESULT
                 CR.
                        PR.
                               NC.
                                     PΠ
        ##
        ##
##
 , , AGE = v30 39, CLINICAL STAGE = II2, BULKY DISEASE = YES, HISTOLOGICAL CLASSIFICATION = HIGH GRAD
##
##
           EARLY_RESULT
##
## FIVE_YEAR_RESULT
                 CR
                        PR
        ##
        ##
##
 , , AGE = v40_44, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
           EARLY_RESULT
## FIVE YEAR RESULT
                        PR.
        ##
##
        ##
 , , AGE = v45_49, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
##
           EARLY RESULT
## FIVE YEAR RESULT
                 CR.
                        PR.
        ##
        ##
 , , AGE = v50_54, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                 CR
                        PR.
##
        ##
##
## , , AGE = v55_59, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
```

```
EARLY RESULT
##
                               NC
                                     PD
## FIVE_YEAR_RESULT
                 CR
                        PR
        ##
        ##
##
 , , AGE = v60 64, CLINICAL STAGE = II2, BULKY DISEASE = YES, HISTOLOGICAL CLASSIFICATION = HIGH GRAD
##
##
##
           EARLY RESULT
## FIVE_YEAR_RESULT
                        PR
                               NC
                                     PD
                 CR.
        ##
##
        ##
 , , AGE = v65_69, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                 CR
                        PR
                               NC
                                     PD
        ##
##
        ##
 , , AGE = v70_79, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
           EARLY RESULT
##
                                     PD
## FIVE_YEAR_RESULT
                 CR
                        PR
                               NC
        ##
        ##
 , , AGE = v80_89, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
           EARLY_RESULT
##
## FIVE_YEAR_RESULT
                 CR
                        PR
                               NC
                                     PD
##
        ##
        ##
  , AGE = vGE90, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
           EARLY RESULT
##
## FIVE YEAR RESULT
                        PR
                               NC
                                     PD
        ##
        ##
##
  , , AGE = v10_19, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
##
           EARLY RESULT
## FIVE_YEAR_RESULT
                        PR
                               NC
                                     ΡD
                 CR.
        ##
        ##
##
 , , AGE = v20_29, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
           EARLY_RESULT
                                     PD
## FIVE_YEAR_RESULT
                 CR
                        PR
                               NC.
##
        ##
```

```
, , AGE = v30_39, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
            EARLY RESULT
                                NC
## FIVE_YEAR_RESULT
                  CR
                         PR
##
         ##
##
##
  , , AGE = v40_44, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
            EARLY_RESULT
## FIVE_YEAR_RESULT
                  CR
                         PR
                                NC
                                       ΡD
         ##
##
         ##
  , , AGE = v45_49, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
            EARLY_RESULT
##
## FIVE_YEAR_RESULT
                                NC
                                       PD
                  CR.
                         PR.
         ##
##
         ##
 , , AGE = v50_54, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
            EARLY RESULT
## FIVE YEAR RESULT
                  CR.
                         PR.
                                NC
                                       PD
##
         ##
 , , AGE = v55_59, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
            EARLY_RESULT
## FIVE_YEAR_RESULT
                  CR
                         PR
                                NC
                                       PD
##
         ##
  , , AGE = v60_64, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
##
            EARLY_RESULT
## FIVE_YEAR_RESULT
                  CR.
                         PR
                                       PD
         ##
         ##
##
##
  , , AGE = v65_69, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
            EARLY_RESULT
                                NC
                                       PD
## FIVE_YEAR_RESULT
                  CR
                         PR
##
         ##
##
  , , AGE = v70_79, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
##
            EARLY RESULT
## FIVE_YEAR_RESULT
                  CR
                         PR
                                NC
                                       PD
         ##
```

```
##
        ##
##
  , , AGE = v80 89, CLINICAL STAGE = III, BULKY DISEASE = YES, HISTOLOGICAL CLASSIFICATION = HIGH GRAD
##
##
           EARLY RESULT
                               NC
## FIVE YEAR RESULT
                 CR
                        PR
        ##
        ##
##
 , , AGE = vGE90, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
            EARLY_RESULT
##
## FIVE_YEAR_RESULT
                 CR.
                        PR.
        ##
        ##
##
  , , AGE = v10_19, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
##
           EARLY RESULT
## FIVE YEAR RESULT
                        PR
##
        ##
##
  , , AGE = v20_29, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
            EARLY RESULT
## FIVE_YEAR_RESULT
                        PR
                 CR.
        ##
        ##
##
##
  , , AGE = v30_39, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
            EARLY_RESULT
## FIVE_YEAR_RESULT
                        PR
                 CR.
        ##
        ##
  , , AGE = v40_44, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
            EARLY_RESULT
##
## FIVE YEAR RESULT
        ##
        ##
##
 , , AGE = v45_49, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
            EARLY_RESULT
## FIVE_YEAR_RESULT
                 CR
                        PR
                               NC
                                      PD
##
        ##
        ##
 , , AGE = v50_54, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
```

```
## FIVE_YEAR_RESULT
                CR
                   PR NC
        ##
##
        ##
##
 , , AGE = v55_59, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
           EARLY RESULT
## FIVE YEAR RESULT
                 CR
                       PR
        ##
##
 , , AGE = v60_64, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                CR
                       PR
        ##
##
 , , AGE = v65_69, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
##
           EARLY_RESULT
## FIVE YEAR RESULT
        ##
        ##
##
 , , AGE = v70_79, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
           EARLY_RESULT
                       PR
                              NC
## FIVE_YEAR_RESULT
                CR
        ##
        ##
 , , AGE = v80_89, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
           EARLY RESULT
## FIVE_YEAR_RESULT
                CR.
                       PR.
        ##
##
 , , AGE = vGE90, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
           EARLY RESULT
##
## FIVE YEAR RESULT
                CR
                       PR
        ##
        ##
 , , AGE = v10_19, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                       PR
        ##
        ##
##
## , , AGE = v20 29, CLINICAL STAGE = I, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = HIGH GRADE,
```

```
##
##
           EARLY_RESULT
## FIVE YEAR RESULT
                CR.
        ##
        ##
 , , AGE = v30 39, CLINICAL STAGE = I, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = HIGH GRADE,
##
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                CR
                       PR
        ##
##
 , , AGE = v40_44, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
           EARLY_RESULT
                             NC
## FIVE_YEAR_RESULT
                CR
                       PR
        ##
##
##
 , , AGE = v45_49, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
           EARLY RESULT
## FIVE YEAR RESULT
                       PR
        ##
        ##
 , , AGE = v50_54, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                       PR
##
        ##
##
 , , AGE = v55_59, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH GRADE,
##
##
           EARLY RESULT
## FIVE_YEAR_RESULT
                CR.
                       PR.
        ##
        ##
##
 , , AGE = v60_64, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                CR
        ##
        ##
##
##
 , , AGE = v65_69, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
           EARLY_RESULT
##
## FIVE YEAR RESULT
                CR
                       PR
##
        ##
```

```
##
 , , AGE = v70_79, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
            EARLY_RESULT
##
## FIVE YEAR RESULT
                  CR
                         PR
        ##
        ##
##
  , , AGE = v80_89, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
##
            EARLY_RESULT
## FIVE YEAR RESULT
                  CR
                         PR
                                NC
        ##
##
  , , AGE = vGE90, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE, I
##
            EARLY RESULT
##
## FIVE YEAR RESULT
                  CR
                         PR
        ##
        ##
 , , AGE = v10_19, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
            EARLY RESULT
## FIVE_YEAR_RESULT
                  CR.
                         PR.
        ##
        ##
##
  , , AGE = v20_29, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
            EARLY_RESULT
                         PR
                                NC
        ##
        ##
##
 , , AGE = v30 39, CLINICAL STAGE = II1, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = HIGH GRADE
##
            EARLY RESULT
##
## FIVE_YEAR_RESULT
                         PR
                  CR
        ##
##
  , , AGE = v40_44, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
            EARLY_RESULT
## FIVE YEAR RESULT
                  CR.
                         PR
         ##
        ##
##
 , , AGE = v45_49, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
            EARLY RESULT
```

NC

PD

PR

## FIVE YEAR RESULT

```
##
        ##
        ##
 , , AGE = v50_54, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
           EARLY RESULT
##
## FIVE YEAR RESULT
                 CR
                               NC
##
        ##
        ##
##
 , , AGE = v55_59, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
           EARLY RESULT
## FIVE_YEAR_RESULT
                 CR
                        PR
                               NC
                                      PΠ
        ##
##
        ##
 , , AGE = v60_64, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
           EARLY RESULT
## FIVE YEAR RESULT
                 CR.
                        PR.
                               NC.
                                      ΡD
        ##
        ##
##
 , , AGE = v65 69, CLINICAL STAGE = II1, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = HIGH GRADE
##
##
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                 CR
                        PR
        ##
        ##
##
##
 , , AGE = v70_79, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
           EARLY_RESULT
##
## FIVE YEAR RESULT
                        PR.
        ##
##
        ##
 , , AGE = v80_89, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
##
           EARLY RESULT
## FIVE YEAR RESULT
                 CR.
                        PR.
        ##
##
        , , AGE = vGE90, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                 CR
                        PR.
##
        ##
##
 , , AGE = v10_19, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
```

```
##
           EARLY RESULT
                               NC
                                      PD
## FIVE_YEAR_RESULT
                 CR
                        PR
        ##
        ##
##
 , , AGE = v20 29, CLINICAL STAGE = II2, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = HIGH GRADE
##
##
##
           EARLY RESULT
## FIVE_YEAR_RESULT
                 CR
                        PR
                               NC
                                      חק
        ##
##
        ##
 , , AGE = v30_39, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                 CR
                        PR
                               NC
                                      PD
        ##
##
        ##
##
 , , AGE = v40 44, CLINICAL STAGE = II2, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = HIGH GRADE
##
           EARLY RESULT
##
                               NC
                                     PD
## FIVE_YEAR_RESULT
                 CR
                        PR
        ##
        ##
##
 , , AGE = v45_49, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
           EARLY_RESULT
##
## FIVE_YEAR_RESULT
                 CR
                        PR
                               NC
                                     PD
##
        ##
        ##
  , AGE = v50_54, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
           EARLY RESULT
##
## FIVE YEAR RESULT
                        PR
                               NC
                                      PD
        ##
        ##
##
  , , AGE = v55_59, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
##
           EARLY RESULT
                                      PD
## FIVE_YEAR_RESULT
                        PR
                               NC.
                 CR.
        ##
        ##
##
 , , AGE = v60_64, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
           EARLY_RESULT
                                      PD
## FIVE_YEAR_RESULT
                 CR
                        PR
                               NC.
##
        ##
```

```
, , AGE = v65_69, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
            EARLY RESULT
                                NC
## FIVE_YEAR_RESULT
                  CR
                         PR
##
         ##
##
  , , AGE = v70_79, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
##
            EARLY_RESULT
 FIVE_YEAR_RESULT
                  CR
                         PR
                                NC
                                        PD
         ##
##
         ##
  , , AGE = v80_89, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
            EARLY_RESULT
##
## FIVE_YEAR_RESULT
                         PR
                                NC
                                        PD
                  CR.
         ##
##
         ##
 , , AGE = vGE90, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
##
            EARLY RESULT
## FIVE YEAR RESULT
                  CR.
                         PR.
                                NC
                                        PD
##
         ##
         ##
  , , AGE = v10_19, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
            EARLY_RESULT
## FIVE_YEAR_RESULT
                  CR
                         PR
                                NC
                                        PD
##
         ##
  , , AGE = v20_29, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
            EARLY_RESULT
##
                                        PD
## FIVE_YEAR_RESULT
                  CR.
                         PR
                                NC
         ##
         ##
##
##
  , , AGE = v30_39, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
            EARLY_RESULT
                         PR
                                NC
                                        PD
## FIVE_YEAR_RESULT
                  CR
##
         ##
##
  , , AGE = v40_44, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
##
            EARLY RESULT
## FIVE_YEAR_RESULT
                  CR
                         PR.
                                NC
                                        PD
         ##
```

```
##
        ##
  , , AGE = v45 49, CLINICAL STAGE = III, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = HIGH GRADE
##
##
##
            EARLY RESULT
                               NC
## FIVE YEAR RESULT
                 CR
                        PR
        ##
        ##
##
 , , AGE = v50_54, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
            EARLY_RESULT
##
## FIVE_YEAR_RESULT
                 CR.
                        PR.
        ##
        ##
##
  , , AGE = v55_59, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
##
           EARLY RESULT
## FIVE YEAR RESULT
                        PR
                               NC
##
        ##
##
  , , AGE = v60_64, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
            EARLY RESULT
## FIVE_YEAR_RESULT
                        PR
                               NC
                 CR.
        ##
        ##
##
##
  , , AGE = v65_69, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
            EARLY_RESULT
## FIVE_YEAR_RESULT
                 CR
                        PR
        ##
        ##
  , , AGE = v70_79, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
            EARLY_RESULT
##
## FIVE YEAR RESULT
        ##
        ##
##
 , , AGE = v80_89, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
            EARLY RESULT
## FIVE_YEAR_RESULT
                 CR
                        PR
                               NC
                                      PD
##
        ##
        ##
 , , AGE = vGE90, CLINICAL STAGE = III, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = HIGH GRADE,
##
```

```
## FIVE_YEAR_RESULT
                CR
                   PR NC
        ##
##
        ##
##
 , , AGE = v10_19, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
           EARLY RESULT
## FIVE YEAR RESULT
                 CR
                        PR
##
        ##
##
 , , AGE = v20_29, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                 CR
                       PR
##
        ##
##
 , , AGE = v30 39, CLINICAL STAGE = IV, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = HIGH GRADE,
##
##
##
           EARLY_RESULT
## FIVE YEAR RESULT
        ##
        ##
##
 , , AGE = v40_44, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
           EARLY_RESULT
                       PR
                              NC
## FIVE_YEAR_RESULT
                 CR
        ##
##
        ##
 , , AGE = v45_49, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
           EARLY RESULT
## FIVE_YEAR_RESULT
                 CR.
                       PR.
        ##
##
 , , AGE = v50_54, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
           EARLY RESULT
##
## FIVE YEAR RESULT
                 CR
                       PR
        ##
        ##
 , , AGE = v55_59, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
##
           EARLY_RESULT
## FIVE_YEAR_RESULT
                       PR
                              NC
        ##
        ##
##
## , , AGE = v60 64, CLINICAL STAGE = IV, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = HIGH GRADE,
```

```
##
##
              EARLY_RESULT
## FIVE YEAR RESULT
                     CR.
          ##
##
          ##
  , , AGE = v65 69, CLINICAL STAGE = IV, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = HIGH GRADE,
##
##
              EARLY_RESULT
## FIVE_YEAR_RESULT
                     CR
                             PR
          ##
##
  , , AGE = v70_79, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
              EARLY_RESULT
                                     NC
## FIVE_YEAR_RESULT
                     CR
                             PR
          ##
##
##
  , , AGE = v80_89, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
              EARLY_RESULT
## FIVE YEAR RESULT
                             PR
          ##
          ##
  , , AGE = vGE90, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
              EARLY_RESULT
## FIVE_YEAR_RESULT
                             PR
##
          ##
##
  , , AGE = v10_19, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
              EARLY RESULT
## FIVE_YEAR_RESULT
                     CR.
                             PR.
          ALIVE 0.89999998 0.50000000 0.00000000 0.00000000
##
          DEATH 0.10000002 0.50000000 1.00000000 1.00000000
##
##
  , , AGE = v20_29, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
##
              EARLY_RESULT
## FIVE_YEAR_RESULT
                     CR
          ALIVE 0.89999998 0.50000000 0.00000000 0.00000000
##
          DEATH 0.10000002 0.50000000 1.00000000 1.00000000
##
##
##
  , , AGE = v30_39, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
              EARLY_RESULT
##
## FIVE YEAR RESULT
                     CR
                             PR
##
          ALIVE 0.89999998 0.50000000 0.00000000 0.00000000
          DEATH 0.10000002 0.50000000 1.00000000 1.00000000
##
```

```
##
   , , AGE = v40_44, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
                   EARLY_RESULT
##
## FIVE YEAR RESULT
                            CR
                                       PR
              ALIVE 0.89999998 0.50000000 0.00000000 0.00000000
##
              DEATH 0.10000002 0.50000000 1.00000000 1.00000000
##
##
##
   , , AGE = v45_49, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                   EARLY_RESULT
## FIVE YEAR RESULT
                            CR
                                       PR
                                                   NC
              ALIVE 0.89999998 0.50000000 0.00000000 0.00000000
              DEATH 0.10000002 0.50000000 1.00000000 1.00000000
##
##
   , , AGE = v50_54, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
                   EARLY RESULT
##
## FIVE YEAR RESULT
                            CR
                                       PR
              ALIVE 0.89999998 0.50000000 0.00000000 0.00000000
##
              DEATH 0.10000002 0.50000000 1.00000000 1.00000000
##
   , , AGE = v55_59, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
                   EARLY_RESULT
##
## FIVE_YEAR_RESULT
                            CR.
                                       PR.
              ALIVE 0.89999998 0.50000000 0.00000000 0.00000000
##
              DEATH 0.10000002 0.50000000 1.00000000 1.00000000
##
##
   , , AGE = v60_64, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                   EARLY_RESULT
                                       PR
                                                   NC
              ALIVE 0.89999998 0.50000000 0.00000000 0.00000000
##
              DEATH 0.10000002 0.50000000 1.00000000 1.00000000
##
##
  , , AGE = v65 69, CLINICAL STAGE = I, BULKY DISEASE = YES, HISTOLOGICAL CLASSIFICATION = LOW GRADE,
##
                   EARLY RESULT
##
## FIVE_YEAR_RESULT
                            CR
                                       PR
              ALIVE 0.89999998 0.50000000 0.00000000 0.00000000
              DEATH 0.10000002 0.50000000 1.00000000 1.00000000
##
##
   , , AGE = v70_79, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                   EARLY_RESULT
## FIVE YEAR RESULT
                            CR.
                                       PR
              ALIVE 0.84999997 0.50000000 0.00000000 0.00000000
##
              DEATH 0.15000003 0.50000000 1.00000000 1.00000000
##
##
  , , AGE = v80_89, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
                   EARLY RESULT
## FIVE YEAR RESULT
                                       PR
                                                   NC
                                                              PD
```

```
##
              ALIVE 0.84999997 0.50000000 0.00000000 0.00000000
##
              DEATH 0.15000003 0.50000000 1.00000000 1.00000000
##
   , , AGE = vGE90, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE, I
##
##
                   EARLY RESULT
##
## FIVE YEAR RESULT
                            CR
                                        PR
##
              ALIVE 0.84999997 0.50000000 0.00000000 0.00000000
##
              DEATH 0.15000003 0.50000000 1.00000000 1.00000000
##
   , , AGE = v10_19, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
                   EARLY RESULT
## FIVE_YEAR_RESULT
                                        PR
                                                   NC
                                                              PΠ
              ALIVE 0.85000002 0.50000000 0.00000000 0.00000000
##
##
              DEATH 0.14999998 0.50000000 1.00000000 1.00000000
##
   , , AGE = v20_29, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
                   EARLY RESULT
## FIVE_YEAR_RESULT
                            CR.
                                        PR.
                                                   NC
                                                              ΡD
              ALIVE 0.85000002 0.50000000 0.00000000 0.00000000
##
              DEATH 0.14999998 0.50000000 1.00000000 1.00000000
##
##
##
  , , AGE = v30_39, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
                   EARLY_RESULT
##
## FIVE_YEAR_RESULT
                            CR
                                        PR
              ALIVE 0.85000002 0.50000000 0.00000000 0.00000000
##
              DEATH 0.14999998 0.50000000 1.00000000 1.00000000
##
##
   , , AGE = v40_44, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
                   EARLY_RESULT
## FIVE YEAR RESULT
                            CR.
                                        PR.
              ALIVE 0.85000002 0.50000000 0.00000000 0.00000000
##
##
              DEATH 0.14999998 0.50000000 1.00000000 1.00000000
##
   , , AGE = v45_49, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
##
                   EARLY RESULT
## FIVE YEAR RESULT
                            CR.
                                        PR.
##
              ALIVE 0.85000002 0.50000000 0.00000000 0.00000000
##
              DEATH 0.14999998 0.50000000 1.00000000 1.00000000
   , , AGE = v50_54, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
                   EARLY_RESULT
## FIVE_YEAR_RESULT
                            CR
                                        PR.
##
              ALIVE 0.85000002 0.50000000 0.00000000 0.00000000
              DEATH 0.14999998 0.50000000 1.00000000 1.00000000
##
##
## , , AGE = v55_59, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
```

```
EARLY RESULT
##
                                                NC
                                                          PD
## FIVE_YEAR_RESULT
                          CR
                                     PR
             ALIVE 0.85000002 0.50000000 0.00000000 0.00000000
##
             DEATH 0.14999998 0.50000000 1.00000000 1.00000000
##
##
  , , AGE = v60 64, CLINICAL STAGE = II1, BULKY DISEASE = YES, HISTOLOGICAL CLASSIFICATION = LOW GRADE
##
##
##
                  EARLY RESULT
## FIVE_YEAR_RESULT
                          CR
                                     PR
                                                NC
                                                          PD
             ALIVE 0.85000002 0.50000000 0.00000000 0.00000000
##
##
             DEATH 0.14999998 0.50000000 1.00000000 1.00000000
##
   , , AGE = v65_69, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
##
                  EARLY_RESULT
## FIVE_YEAR_RESULT
                           CR
                                     PR
                                                NC
                                                          PD
             ALIVE 0.85000002 0.50000000 0.00000000 0.00000000
##
##
             DEATH 0.14999998 0.50000000 1.00000000 1.00000000
##
   , , AGE = v70_79, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
                  EARLY RESULT
##
                                                NC
                                                          PD
## FIVE_YEAR_RESULT
                          CR
                                     PR
             ##
             DEATH 0.20000000 0.50000000 1.00000000 1.00000000
##
##
   , , AGE = v80_89, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
                  EARLY_RESULT
##
## FIVE_YEAR_RESULT
                                     PR
                                                NC
                                                          PD
                          CR.
##
             ##
             DEATH 0.20000000 0.50000000 1.00000000 1.00000000
##
    , AGE = vGE90, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                  EARLY RESULT
##
## FIVE YEAR RESULT
                                     PR
                                                NC
                                                          PD
             ##
             DEATH 0.20000000 0.50000000 1.00000000 1.00000000
##
##
   , , AGE = v10_19, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
##
                  EARLY RESULT
## FIVE_YEAR_RESULT
                                     PR
                                                NC
                                                          ΡD
                          CR.
             ALIVE 0.60000000 0.15000000 0.00000000 0.00000000
##
             DEATH 0.40000000 0.85000000 1.00000000 1.00000000
##
##
   , , AGE = v20_29, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
                  EARLY_RESULT
                                                          PD
## FIVE_YEAR_RESULT
                          CR
                                     PR
                                                NC.
##
             ALIVE 0.60000000 0.15000000 0.00000000 0.00000000
##
             DEATH 0.40000000 0.85000000 1.00000000 1.00000000
```

```
, , AGE = v30_39, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
                   EARLY RESULT
                                                   NC
## FIVE_YEAR_RESULT
                             CR
                                        PR
##
              ALIVE 0.60000000 0.15000000 0.00000000 0.00000000
              DEATH 0.40000000 0.85000000 1.00000000 1.00000000
##
##
##
   , , AGE = v40_44, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
                   EARLY_RESULT
  FIVE_YEAR_RESULT
                             CR
                                        PR
                                                   NC
                                                               PD
              ALIVE 0.60000000 0.15000000 0.00000000 0.00000000
##
##
              DEATH 0.40000000 0.85000000 1.00000000 1.00000000
##
   , , AGE = v45_49, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
                   EARLY_RESULT
##
## FIVE_YEAR_RESULT
                                        PR
                                                   NC
                                                               PD
                             CR.
              ALIVE 0.60000000 0.15000000 0.00000000 0.00000000
##
##
              DEATH 0.40000000 0.85000000 1.00000000 1.00000000
##
   , , AGE = v50_54, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
##
                   EARLY RESULT
## FIVE_YEAR_RESULT
                             CR.
                                        PR.
                                                   NC
                                                               PD
##
              ALIVE 0.60000000 0.15000000 0.00000000 0.00000000
              DEATH 0.40000000 0.85000000 1.00000000 1.00000000
##
##
   , , AGE = v55_59, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
##
                   EARLY_RESULT
## FIVE_YEAR_RESULT
                             CR
                                        PR
                                                   NC
                                                               PD
##
              ALIVE 0.60000000 0.15000000 0.00000000 0.00000000
              DEATH 0.40000000 0.85000000 1.00000000 1.00000000
##
   , , AGE = v60_64, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
                   EARLY_RESULT
##
                                                               PD
## FIVE_YEAR_RESULT
                             CR.
                                        PR
                                                   NC
              ALIVE 0.60000000 0.15000000 0.00000000 0.00000000
##
              DEATH 0.40000000 0.85000000 1.00000000 1.00000000
##
##
##
   , , AGE = v65_69, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
                   EARLY_RESULT
                                                   NC
                                                               PD
## FIVE_YEAR_RESULT
                             CR
                                        PR
##
              ALIVE 0.60000000 0.15000000 0.00000000 0.00000000
              DEATH 0.40000000 0.85000000 1.00000000 1.00000000
##
##
   , , AGE = v70_79, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
##
                   EARLY RESULT
## FIVE_YEAR_RESULT
                             CR
                                        PR
                                                   NC
                                                               PD
              ALIVE 0.55000000 0.15000000 0.00000000 0.00000000
##
```

```
##
              DEATH 0.45000000 0.85000000 1.00000000 1.00000000
##
   , , AGE = v80 89, CLINICAL STAGE = II2, BULKY DISEASE = YES, HISTOLOGICAL CLASSIFICATION = LOW GRADE
##
##
##
                   EARLY RESULT
                                                   NC
## FIVE YEAR RESULT
                            CR
                                        PR
              ALIVE 0.55000000 0.15000000 0.00000000 0.00000000
##
              DEATH 0.45000000 0.85000000 1.00000000 1.00000000
##
##
   , , AGE = vGE90, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                   EARLY_RESULT
##
## FIVE_YEAR_RESULT
                            CR.
                                        PR.
              ALIVE 0.55000000 0.15000000 0.00000000 0.00000000
##
              DEATH 0.45000000 0.85000000 1.00000000 1.00000000
##
##
   , , AGE = v10_19, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
##
                   EARLY RESULT
## FIVE YEAR RESULT
                                        PR
##
              ALIVE 0.40000000 0.15000000 0.00000000 0.00000000
              DEATH 0.60000000 0.85000000 1.00000000 1.00000000
##
##
   , , AGE = v20_29, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
                   EARLY RESULT
## FIVE_YEAR_RESULT
                                        PR
                                                   NC
                            CR.
              ALIVE 0.40000000 0.15000000 0.00000000 0.00000000
##
              DEATH 0.60000000 0.85000000 1.00000000 1.00000000
##
##
##
   , , AGE = v30_39, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
                   EARLY_RESULT
## FIVE_YEAR_RESULT
                                        PR
                            CR.
              ALIVE 0.40000000 0.15000000 0.00000000 0.00000000
##
              DEATH 0.60000000 0.85000000 1.00000000 1.00000000
##
   , , AGE = v40_44, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
                   EARLY_RESULT
##
## FIVE YEAR RESULT
                            CR.
              ALIVE 0.40000000 0.15000000 0.00000000 0.00000000
##
              DEATH 0.60000000 0.85000000 1.00000000 1.00000000
##
##
   , , AGE = v45_49, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
                   EARLY_RESULT
## FIVE_YEAR_RESULT
                            CR
                                        PR
                                                   NC
                                                              PD
##
              ALIVE 0.40000000 0.15000000 0.00000000 0.00000000
##
              DEATH 0.60000000 0.85000000 1.00000000 1.00000000
##
  , , AGE = v50_54, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
```

```
## FIVE_YEAR_RESULT
                            CR
                                 PR NC
              ALIVE 0.40000000 0.15000000 0.00000000 0.00000000
##
              DEATH 0.60000000 0.85000000 1.00000000 1.00000000
##
##
##
  , , AGE = v55_59, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
                   EARLY RESULT
## FIVE YEAR RESULT
                            CR
                                       PR
              ALIVE 0.40000000 0.15000000 0.00000000 0.00000000
##
              DEATH 0.60000000 0.85000000 1.00000000 1.00000000
##
##
   , , AGE = v60_64, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
                   EARLY_RESULT
##
## FIVE_YEAR_RESULT
                            CR
                                       PR
              ALIVE 0.40000000 0.15000000 0.00000000 0.00000000
              DEATH 0.60000000 0.85000000 1.00000000 1.00000000
##
##
   , , AGE = v65_69, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
##
                   EARLY_RESULT
## FIVE YEAR RESULT
              ALIVE 0.40000000 0.15000000 0.00000000 0.00000000
##
              DEATH 0.60000000 0.85000000 1.00000000 1.00000000
##
##
   , , AGE = v70_79, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
##
                   EARLY_RESULT
                                       PR
                                                  NC
## FIVE_YEAR_RESULT
                            CR
              ALIVE 0.35000000 0.15000000 0.00000000 0.00000000
##
              DEATH 0.65000000 0.85000000 1.00000000 1.00000000
##
  , , AGE = v80_89, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE
##
                   EARLY RESULT
## FIVE_YEAR_RESULT
                            CR.
                                       PR.
              ALIVE 0.35000000 0.15000000 0.00000000 0.00000000
              DEATH 0.65000000 0.85000000 1.00000000 1.00000000
##
##
  , , AGE = vGE90, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
                   EARLY RESULT
##
## FIVE YEAR RESULT
                            CR
                                       PR
              ALIVE 0.35000000 0.15000000 0.00000000 0.00000000
##
              DEATH 0.65000000 0.85000000 1.00000000 1.00000000
##
   , , AGE = v10_19, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                   EARLY_RESULT
## FIVE_YEAR_RESULT
                                       PR
                                                  NC
                            CR.
              ALIVE 0.40000000 0.15000000 0.00000000 0.00000000
##
              DEATH 0.60000000 0.85000000 1.00000000 1.00000000
##
##
## , , AGE = v20 29, CLINICAL STAGE = IV, BULKY DISEASE = YES, HISTOLOGICAL CLASSIFICATION = LOW GRADE,
```

```
##
##
                   EARLY_RESULT
## FIVE YEAR RESULT
                            CR.
              ALIVE 0.40000000 0.15000000 0.00000000 0.00000000
##
##
              DEATH 0.60000000 0.85000000 1.00000000 1.00000000
##
  , , AGE = v30 39, CLINICAL STAGE = IV, BULKY DISEASE = YES, HISTOLOGICAL CLASSIFICATION = LOW GRADE,
##
##
                   EARLY_RESULT
## FIVE_YEAR_RESULT
                            CR
                                       PR
              ALIVE 0.40000000 0.15000000 0.00000000 0.00000000
              DEATH 0.60000000 0.85000000 1.00000000 1.00000000
##
##
  , , AGE = v40_44, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                   EARLY_RESULT
                                                   NC
## FIVE_YEAR_RESULT
                            CR
                                       PR
              ALIVE 0.40000000 0.15000000 0.00000000 0.00000000
              DEATH 0.60000000 0.85000000 1.00000000 1.00000000
##
##
##
  , , AGE = v45_49, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                   EARLY RESULT
## FIVE YEAR RESULT
                                       PR
              ALIVE 0.40000000 0.15000000 0.00000000 0.00000000
##
              DEATH 0.60000000 0.85000000 1.00000000 1.00000000
##
   , , AGE = v50_54, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                   EARLY_RESULT
## FIVE_YEAR_RESULT
                                       PR
##
              ALIVE 0.40000000 0.15000000 0.00000000 0.00000000
              DEATH 0.60000000 0.85000000 1.00000000 1.00000000
##
##
   , , AGE = v55_59, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                   EARLY RESULT
## FIVE_YEAR_RESULT
                            CR.
                                       PR.
              ALIVE 0.40000000 0.15000000 0.00000000 0.00000000
##
              DEATH 0.60000000 0.85000000 1.00000000 1.00000000
##
##
   , , AGE = v60_64, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
##
                   EARLY_RESULT
## FIVE_YEAR_RESULT
                            CR
              ALIVE 0.40000000 0.15000000 0.00000000 0.00000000
##
              DEATH 0.60000000 0.85000000 1.00000000 1.00000000
##
##
##
   , , AGE = v65_69, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
                   EARLY_RESULT
##
## FIVE YEAR RESULT
                            CR
                                       PR
##
              ALIVE 0.40000000 0.15000000 0.00000000 0.00000000
              DEATH 0.60000000 0.85000000 1.00000000 1.00000000
##
```

```
##
  , , AGE = v70_79, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
                   EARLY_RESULT
##
## FIVE YEAR RESULT
                            CR
                                       PR
              ALIVE 0.35000000 0.15000000 0.00000000 0.00000000
##
              DEATH 0.65000000 0.85000000 1.00000000 1.00000000
##
##
##
   , , AGE = v80_89, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                   EARLY_RESULT
## FIVE YEAR RESULT
                            CR
                                       PR
                                                   NC
              ALIVE 0.35000000 0.15000000 0.00000000 0.00000000
              DEATH 0.65000000 0.85000000 1.00000000 1.00000000
##
##
   , , AGE = vGE90, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
                   EARLY RESULT
##
## FIVE YEAR RESULT
                            CR
                                       PR
              ALIVE 0.35000000 0.15000000 0.00000000 0.00000000
##
              DEATH 0.65000000 0.85000000 1.00000000 1.00000000
##
   , , AGE = v10_19, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE, I
##
                   EARLY_RESULT
##
## FIVE_YEAR_RESULT
                            CR.
                                       PR.
              ALIVE 0.94999999 0.75000000 0.00000000 0.00000000
##
              DEATH 0.05000001 0.25000000 1.00000000 1.00000000
##
##
   , , AGE = v20_29, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE, I
##
##
                   EARLY_RESULT
                                                   NC
              ALIVE 0.94999999 0.75000000 0.00000000 0.000000000
##
              DEATH 0.05000001 0.25000000 1.00000000 1.00000000
##
##
  , , AGE = v30 39, CLINICAL STAGE = I, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = LOW GRADE, I
##
                   EARLY RESULT
##
## FIVE_YEAR_RESULT
                            CR
                                       PR
              ALIVE 0.94999999 0.75000000 0.00000000 0.000000000
              DEATH 0.05000001 0.25000000 1.00000000 1.00000000
##
##
   , , AGE = v40_44, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE, I
##
##
                   EARLY_RESULT
## FIVE YEAR RESULT
                            CR.
                                       PR
              ALIVE 0.94999999 0.75000000 0.00000000 0.00000000
##
              DEATH 0.05000001 0.25000000 1.00000000 1.00000000
##
##
  , , AGE = v45_49, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE, I
##
                   EARLY RESULT
```

NC

PD

PR

## FIVE YEAR RESULT

```
##
              ALIVE 0.94999999 0.75000000 0.00000000 0.00000000
##
              DEATH 0.05000001 0.25000000 1.00000000 1.00000000
##
   , , AGE = v50_54, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE, I
##
##
                   EARLY RESULT
##
## FIVE YEAR RESULT
                            CR
##
              ALIVE 0.94999999 0.75000000 0.00000000 0.00000000
##
              DEATH 0.05000001 0.25000000 1.00000000 1.00000000
##
   , , AGE = v55_59, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE, I
##
##
                   EARLY_RESULT
## FIVE_YEAR_RESULT
                                        PR
                                                   NC
                                                               PΠ
              ALIVE 0.94999999 0.75000000 0.00000000 0.000000000
##
##
              DEATH 0.05000001 0.25000000 1.00000000 1.00000000
##
   , , AGE = v60_64, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE, I
##
##
                   EARLY RESULT
## FIVE_YEAR_RESULT
                            CR.
                                        PR.
                                                   NC.
                                                              ΡD
              ALIVE 0.94999999 0.75000000 0.00000000 0.000000000
##
              DEATH 0.05000001 0.25000000 1.00000000 1.00000000
##
##
##
  , , AGE = v65 69, CLINICAL STAGE = I, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = LOW GRADE, I
##
                   EARLY_RESULT
##
## FIVE_YEAR_RESULT
                            CR
                                        PR
              ALIVE 0.94999999 0.75000000 0.00000000 0.000000000
##
              DEATH 0.05000001 0.25000000 1.00000000 1.00000000
##
##
   , , AGE = v70_79, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE, I
##
##
                   EARLY_RESULT
## FIVE YEAR RESULT
                            CR.
                                        PR.
              ALIVE 0.89999998 0.75000000 0.00000000 0.00000000
##
##
              DEATH 0.10000002 0.25000000 1.00000000 1.00000000
##
   , , AGE = v80_89, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE, I
##
##
##
                   EARLY RESULT
## FIVE YEAR RESULT
                            CR
                                        PR.
              ALIVE 0.89999998 0.75000000 0.00000000 0.00000000
##
              DEATH 0.10000002 0.25000000 1.00000000 1.00000000
##
   , , AGE = vGE90, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE, IM
##
##
                   EARLY_RESULT
## FIVE_YEAR_RESULT
                            CR
                                        PR.
##
              ALIVE 0.89999998 0.75000000 0.00000000 0.00000000
              DEATH 0.10000002 0.25000000 1.00000000 1.00000000
##
##
## , , AGE = v10_19, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
```

```
##
                   EARLY RESULT
                                                    NC
                                                               PD
## FIVE_YEAR_RESULT
                             CR
                                        PR
##
              ALIVE 0.94999999 0.75000000 0.00000000 0.00000000
              DEATH 0.05000001 0.25000000 1.00000000 1.00000000
##
##
   , , AGE = v20 29, CLINICAL STAGE = II1, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = LOW GRADE,
##
##
##
                   EARLY RESULT
## FIVE_YEAR_RESULT
                             CR
                                        PR
                                                    NC
                                                               חק
              ALIVE 0.94999999 0.75000000 0.00000000 0.000000000
##
##
              DEATH 0.05000001 0.25000000 1.00000000 1.00000000
##
   , , AGE = v30_39, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
##
                   EARLY_RESULT
## FIVE_YEAR_RESULT
                             CR
                                        PR
                                                    NC
                                                               PD
              ALIVE 0.94999999 0.75000000 0.00000000 0.000000000
##
##
              DEATH 0.05000001 0.25000000 1.00000000 1.00000000
##
   , , AGE = v40_44, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
                   EARLY RESULT
##
                                                    NC
                                                               PD
## FIVE_YEAR_RESULT
                             CR
                                        PR
              ALIVE 0.94999999 0.75000000 0.00000000 0.00000000
##
              DEATH 0.05000001 0.25000000 1.00000000 1.00000000
##
##
   , , AGE = v45_49, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                   EARLY_RESULT
##
## FIVE_YEAR_RESULT
                             CR
                                        PR
                                                    NC
                                                               PD
##
              ALIVE 0.94999999 0.75000000 0.00000000 0.00000000
##
              DEATH 0.05000001 0.25000000 1.00000000 1.00000000
##
    , AGE = v50_54, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                   EARLY RESULT
##
## FIVE YEAR RESULT
                                        PR
                                                    NC
                                                               PD
              ALIVE 0.94999999 0.75000000 0.00000000 0.000000000
##
              DEATH 0.05000001 0.25000000 1.00000000 1.00000000
##
##
   , , AGE = v55_59, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                   EARLY RESULT
##
## FIVE_YEAR_RESULT
                                        PR
                                                    NC.
                                                               ΡD
                             CR.
              ALIVE 0.94999999 0.75000000 0.00000000 0.00000000
##
              DEATH 0.05000001 0.25000000 1.00000000 1.00000000
##
##
   , , AGE = v60_64, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                   EARLY_RESULT
                                                               PD
## FIVE_YEAR_RESULT
                             CR
                                        PR
                                                    NC.
##
              ALIVE 0.94999999 0.75000000 0.00000000 0.00000000
##
              DEATH 0.05000001 0.25000000 1.00000000 1.00000000
```

```
, , AGE = v65_69, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                   EARLY RESULT
                                                   NC
## FIVE_YEAR_RESULT
                             CR
                                        PR
##
              ALIVE 0.94999999 0.75000000 0.00000000 0.00000000
              DEATH 0.05000001 0.25000000 1.00000000 1.00000000
##
##
   , , AGE = v70_79, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
##
                   EARLY_RESULT
  FIVE_YEAR_RESULT
                             CR
                                        PR
                                                   NC
                                                               PD
              ALIVE 0.89999998 0.75000000 0.00000000 0.00000000
##
##
              DEATH 0.10000002 0.25000000 1.00000000 1.00000000
##
   , , AGE = v80_89, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                   EARLY_RESULT
##
  FIVE_YEAR_RESULT
                                        PR
                                                   NC
                                                               PD
                             CR.
              ALIVE 0.89999998 0.75000000 0.00000000 0.00000000
##
##
              DEATH 0.10000002 0.25000000 1.00000000 1.00000000
##
   , , AGE = vGE90, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
##
                   EARLY RESULT
## FIVE_YEAR_RESULT
                             CR.
                                        PR.
                                                   NC
                                                               PD
##
              ALIVE 0.89999998 0.75000000 0.00000000 0.00000000
              DEATH 0.10000002 0.25000000 1.00000000 1.00000000
##
##
   , , AGE = v10_19, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
##
                   EARLY_RESULT
## FIVE_YEAR_RESULT
                             CR
                                        PR
                                                   NC
                                                               PD
##
              ALIVE 0.80000000 0.25000000 0.00000000 0.00000000
              DEATH 0.20000000 0.75000000 1.00000000 1.00000000
##
   , , AGE = v20_29, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                   EARLY_RESULT
##
                                                               PD
## FIVE_YEAR_RESULT
                             CR.
                                        PR
                                                   NC
              ALIVE 0.80000000 0.25000000 0.00000000 0.00000000
##
              DEATH 0.20000000 0.75000000 1.00000000 1.00000000
##
##
##
   , , AGE = v30_39, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                   EARLY_RESULT
                                        PR
                                                   NC
                                                               PD
## FIVE_YEAR_RESULT
                             CR
##
              ALIVE 0.80000000 0.25000000 0.00000000 0.00000000
              DEATH 0.20000000 0.75000000 1.00000000 1.00000000
##
##
   , , AGE = v40_44, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
##
                   EARLY RESULT
## FIVE_YEAR_RESULT
                             CR
                                        PR
                                                   NC
                                                               PD
              ALIVE 0.80000000 0.25000000 0.00000000 0.00000000
```

```
##
              DEATH 0.20000000 0.75000000 1.00000000 1.00000000
##
##
   , , AGE = v45 49, CLINICAL STAGE = II2, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = LOW GRADE,
##
##
                   EARLY RESULT
                                                   NC
## FIVE YEAR RESULT
                            CR
                                        PR.
              ALIVE 0.80000000 0.25000000 0.00000000 0.00000000
##
              DEATH 0.20000000 0.75000000 1.00000000 1.00000000
##
##
   , , AGE = v50_54, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                   EARLY_RESULT
##
## FIVE_YEAR_RESULT
                            CR.
                                        PR.
              ALIVE 0.80000000 0.25000000 0.00000000 0.00000000
##
              DEATH 0.20000000 0.75000000 1.00000000 1.00000000
##
##
   , , AGE = v55_59, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
##
                   EARLY RESULT
## FIVE YEAR RESULT
                                        PR
                                                   NC
##
              ALIVE 0.80000000 0.25000000 0.00000000 0.00000000
              DEATH 0.20000000 0.75000000 1.00000000 1.00000000
##
##
   , , AGE = v60_64, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                   EARLY RESULT
## FIVE_YEAR_RESULT
                                        PR
                                                   NC
                            CR.
              ALIVE 0.80000000 0.25000000 0.00000000 0.00000000
##
              DEATH 0.20000000 0.75000000 1.00000000 1.00000000
##
##
##
   , , AGE = v65_69, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                   EARLY_RESULT
## FIVE_YEAR_RESULT
                            CR
                                        PR
              ALIVE 0.80000000 0.25000000 0.00000000 0.00000000
##
              DEATH 0.20000000 0.75000000 1.00000000 1.00000000
##
##
   , , AGE = v70_79, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                   EARLY_RESULT
##
## FIVE YEAR RESULT
              ALIVE 0.75000000 0.25000000 0.00000000 0.00000000
##
              DEATH 0.25000000 0.75000000 1.00000000 1.00000000
##
##
   , , AGE = v80_89, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                   EARLY RESULT
## FIVE_YEAR_RESULT
                            CR
                                        PR
                                                   NC
                                                              PD
##
              ALIVE 0.75000000 0.25000000 0.00000000 0.00000000
##
              DEATH 0.25000000 0.75000000 1.00000000 1.00000000
##
  , , AGE = vGE90, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
```

EARLY RESULT

```
## FIVE YEAR RESULT
                            CR
                                       PR
              ALIVE 0.75000000 0.25000000 0.00000000 0.00000000
##
              DEATH 0.25000000 0.75000000 1.00000000 1.00000000
##
##
##
  , , AGE = v10_19, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                   EARLY RESULT
## FIVE YEAR RESULT
                            CR
                                       PR
              ALIVE 0.60000000 0.25000000 0.00000000 0.00000000
##
              DEATH 0.40000000 0.75000000 1.00000000 1.00000000
##
##
   , , AGE = v20_29, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                   EARLY_RESULT
## FIVE_YEAR_RESULT
                            CR
                                       PR
##
              ALIVE 0.60000000 0.25000000 0.00000000 0.00000000
              DEATH 0.40000000 0.75000000 1.00000000 1.00000000
##
##
   , , AGE = v30_39, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
##
                   EARLY_RESULT
## FIVE YEAR RESULT
              ALIVE 0.60000000 0.25000000 0.00000000 0.00000000
##
              DEATH 0.40000000 0.75000000 1.00000000 1.00000000
##
##
   , , AGE = v40_44, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                   EARLY_RESULT
                                       PR
                                                   NC
## FIVE_YEAR_RESULT
                            CR
              ALIVE 0.60000000 0.25000000 0.00000000 0.00000000
##
##
              DEATH 0.40000000 0.75000000 1.00000000 1.00000000
##
  , , AGE = v45_49, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
                   EARLY RESULT
##
## FIVE_YEAR_RESULT
                            CR.
                                       PR.
              ALIVE 0.60000000 0.25000000 0.00000000 0.00000000
              DEATH 0.40000000 0.75000000 1.00000000 1.00000000
##
##
  , , AGE = v50_54, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
                   EARLY RESULT
##
## FIVE YEAR RESULT
                            CR
                                       PR
              ALIVE 0.60000000 0.25000000 0.00000000 0.00000000
##
              DEATH 0.40000000 0.75000000 1.00000000 1.00000000
##
   , , AGE = v55_59, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
##
                   EARLY_RESULT
## FIVE_YEAR_RESULT
                                       PR
                                                   NC
              ALIVE 0.60000000 0.25000000 0.00000000 0.00000000
##
              DEATH 0.40000000 0.75000000 1.00000000 1.00000000
##
##
## , , AGE = v60 64, CLINICAL STAGE = III, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = LOW GRADE,
```

```
##
##
                   EARLY_RESULT
## FIVE YEAR RESULT
                            CR.
              ALIVE 0.60000000 0.25000000 0.00000000 0.00000000
##
##
              DEATH 0.40000000 0.75000000 1.00000000 1.00000000
##
  , , AGE = v65 69, CLINICAL STAGE = III, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = LOW GRADE,
##
##
                   EARLY_RESULT
## FIVE_YEAR_RESULT
                            CR
                                       PR
              ALIVE 0.60000000 0.25000000 0.00000000 0.00000000
              DEATH 0.40000000 0.75000000 1.00000000 1.00000000
##
##
  , , AGE = v70_79, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                   EARLY_RESULT
                                                   NC
## FIVE_YEAR_RESULT
                            CR
                                       PR
              ALIVE 0.55000000 0.25000000 0.00000000 0.00000000
              DEATH 0.45000000 0.75000000 1.00000000 1.00000000
##
##
##
  , , AGE = v80_89, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                   EARLY RESULT
## FIVE YEAR RESULT
                                       PR
              ALIVE 0.55000000 0.25000000 0.00000000 0.00000000
##
              DEATH 0.45000000 0.75000000 1.00000000 1.00000000
##
   , , AGE = vGE90, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
                   EARLY_RESULT
## FIVE_YEAR_RESULT
                                       PR
##
              ALIVE 0.55000000 0.25000000 0.00000000 0.00000000
              DEATH 0.45000000 0.75000000 1.00000000 1.00000000
##
##
   , , AGE = v10_19, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                   EARLY RESULT
## FIVE_YEAR_RESULT
                            CR.
                                       PR.
              ALIVE 0.60000000 0.25000000 0.00000000 0.00000000
##
              DEATH 0.40000000 0.75000000 1.00000000 1.00000000
##
##
   , , AGE = v20_29, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
##
                   EARLY_RESULT
## FIVE_YEAR_RESULT
                            CR
              ALIVE 0.60000000 0.25000000 0.00000000 0.00000000
##
              DEATH 0.40000000 0.75000000 1.00000000 1.00000000
##
##
##
   , , AGE = v30_39, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
                   EARLY_RESULT
##
## FIVE YEAR RESULT
                            CR
                                       PR
##
              ALIVE 0.60000000 0.25000000 0.00000000 0.00000000
              DEATH 0.40000000 0.75000000 1.00000000 1.00000000
##
```

```
##
  , , AGE = v40_44, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
                   EARLY_RESULT
##
## FIVE YEAR RESULT
                            CR
                                       PR
              ALIVE 0.60000000 0.25000000 0.00000000 0.00000000
##
              DEATH 0.40000000 0.75000000 1.00000000 1.00000000
##
##
##
   , , AGE = v45_49, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                   EARLY_RESULT
## FIVE YEAR RESULT
                            CR
                                       PR
                                                   NC
              ALIVE 0.60000000 0.25000000 0.00000000 0.00000000
              DEATH 0.40000000 0.75000000 1.00000000 1.00000000
##
##
   , , AGE = v50_54, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
                   EARLY RESULT
##
## FIVE YEAR RESULT
                            CR
                                       PR
              ALIVE 0.60000000 0.25000000 0.00000000 0.00000000
##
              DEATH 0.40000000 0.75000000 1.00000000 1.00000000
##
   , , AGE = v55_59, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                   EARLY RESULT
## FIVE_YEAR_RESULT
                            CR.
                                       PR.
              ALIVE 0.60000000 0.25000000 0.00000000 0.00000000
##
              DEATH 0.40000000 0.75000000 1.00000000 1.00000000
##
##
   , , AGE = v60_64, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
##
                   EARLY_RESULT
## FIVE_YEAR_RESULT
                                       PR
                                                   NC
              ALIVE 0.60000000 0.25000000 0.00000000 0.00000000
##
              DEATH 0.40000000 0.75000000 1.00000000 1.00000000
##
##
  , , AGE = v65 69, CLINICAL STAGE = IV, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = LOW GRADE,
##
                   EARLY RESULT
##
## FIVE_YEAR_RESULT
                                       PR
                            CR
              ALIVE 0.60000000 0.25000000 0.00000000 0.00000000
              DEATH 0.40000000 0.75000000 1.00000000 1.00000000
##
##
   , , AGE = v70_79, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
                   EARLY_RESULT
##
## FIVE YEAR RESULT
                            CR.
                                       PR
              ALIVE 0.55000000 0.25000000 0.00000000 0.00000000
##
              DEATH 0.45000000 0.75000000 1.00000000 1.00000000
##
##
  , , AGE = v80_89, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE,
##
                   EARLY RESULT
## FIVE YEAR RESULT
                                       PR
                                                   NC
                                                              PD
```

```
##
            ALIVE 0.55000000 0.25000000 0.00000000 0.00000000
##
            DEATH 0.45000000 0.75000000 1.00000000 1.00000000
##
  , , AGE = vGE90, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = LOW_GRADE, I
##
##
                EARLY RESULT
##
## FIVE YEAR RESULT
                                           NC
##
            ALIVE 0.55000000 0.25000000 0.00000000 0.00000000
##
            DEATH 0.45000000 0.75000000 1.00000000 1.00000000
##
  , , AGE = v10_19, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
                EARLY_RESULT
## FIVE_YEAR_RESULT
                        CR
                                  PR
                                           NC
                                                     PΠ
            ##
##
            DEATH 0.20000000 0.80000000 1.00000000 1.00000000
##
  , , AGE = v20_29, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
                EARLY RESULT
## FIVE_YEAR_RESULT
                        CR.
                                  PR.
                                           NC.
                                                     PΠ
            ##
            DEATH 0.20000000 0.80000000 1.00000000 1.00000000
##
##
##
  , , AGE = v30 39, CLINICAL STAGE = I, BULKY DISEASE = YES, HISTOLOGICAL CLASSIFICATION = HIGH GRADE,
##
                EARLY_RESULT
##
## FIVE_YEAR_RESULT
                        CR
                                  PR
            ##
            DEATH 0.20000000 0.80000000 1.00000000 1.00000000
##
##
  , , AGE = v40_44, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
                EARLY_RESULT
##
## FIVE YEAR RESULT
                                  PR.
            ##
##
            DEATH 0.20000000 0.80000000 1.00000000 1.00000000
##
  , , AGE = v45_49, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
##
                EARLY RESULT
## FIVE YEAR RESULT
                        CR.
                                  PR.
            ##
            DEATH 0.20000000 0.80000000 1.00000000 1.00000000
##
  , , AGE = v50_54, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
                EARLY_RESULT
## FIVE_YEAR_RESULT
                        CR
                                  PR.
##
            DEATH 0.20000000 0.80000000 1.00000000 1.00000000
##
##
  , , AGE = v55_59, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
```

```
##
                  EARLY RESULT
                                                NC
                                                          PD
## FIVE_YEAR_RESULT
                          CR
                                     PR
##
             DEATH 0.20000000 0.80000000 1.00000000 1.00000000
##
##
  , , AGE = v60 64, CLINICAL STAGE = I, BULKY DISEASE = YES, HISTOLOGICAL CLASSIFICATION = HIGH GRADE,
##
##
##
                  EARLY RESULT
## FIVE_YEAR_RESULT
                          CR
                                     PR
                                                NC
                                                          חק
             ##
##
             DEATH 0.20000000 0.80000000 1.00000000 1.00000000
##
   , , AGE = v65_69, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
##
                  EARLY_RESULT
## FIVE_YEAR_RESULT
                           CR
                                     PR
                                                NC
                                                          PD
             ##
##
             DEATH 0.20000000 0.80000000 1.00000000 1.00000000
##
   , , AGE = v70_79, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
                  EARLY RESULT
##
                                                NC
                                                          PD
## FIVE_YEAR_RESULT
                          CR
                                     PR
             ALIVE 0.75000000 0.20000000 0.00000000 0.00000000
##
             DEATH 0.25000000 0.80000000 1.00000000 1.00000000
##
##
   , , AGE = v80_89, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
                  EARLY_RESULT
##
## FIVE_YEAR_RESULT
                          CR
                                     PR
                                                NC
                                                          PD
##
             ALIVE 0.75000000 0.20000000 0.00000000 0.00000000
##
             DEATH 0.25000000 0.80000000 1.00000000 1.00000000
##
    , AGE = vGE90, CLINICAL_STAGE = I, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
                  EARLY RESULT
##
## FIVE YEAR RESULT
                                     PR
                                                NC
                                                          PD
             ALIVE 0.75000000 0.20000000 0.00000000 0.00000000
##
             DEATH 0.25000000 0.80000000 1.00000000 1.00000000
##
##
   , , AGE = v10_19, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
##
                  EARLY RESULT
## FIVE_YEAR_RESULT
                                     PR
                                                NC.
                                                          ΡD
                          CR.
             ALIVE 0.75000000 0.20000000 0.00000000 0.00000000
##
             DEATH 0.25000000 0.80000000 1.00000000 1.00000000
##
##
   , , AGE = v20_29, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
                  EARLY_RESULT
                                                          PD
## FIVE_YEAR_RESULT
                          CR
                                     PR
                                                NC.
##
             ALIVE 0.75000000 0.20000000 0.00000000 0.00000000
##
             DEATH 0.25000000 0.80000000 1.00000000 1.00000000
##
```

```
, , AGE = v30_39, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
                   EARLY RESULT
##
                                                  NC
## FIVE_YEAR_RESULT
                            CR
                                       PR
##
              ALIVE 0.75000000 0.20000000 0.00000000 0.00000000
              DEATH 0.25000000 0.80000000 1.00000000 1.00000000
##
##
##
   , , AGE = v40_44, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
                   EARLY_RESULT
## FIVE_YEAR_RESULT
                            CR
                                       PR
                                                  NC
                                                             ΡD
              ALIVE 0.75000000 0.20000000 0.00000000 0.00000000
##
##
              DEATH 0.25000000 0.80000000 1.00000000 1.00000000
##
   , , AGE = v45_49, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
                   EARLY_RESULT
##
## FIVE_YEAR_RESULT
                                                  NC
                                                             PD
                            CR.
                                       PR.
              ALIVE 0.75000000 0.20000000 0.00000000 0.00000000
##
##
              DEATH 0.25000000 0.80000000 1.00000000 1.00000000
##
  , , AGE = v50_54, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
                   EARLY RESULT
## FIVE YEAR RESULT
                            CR.
                                       PR.
                                                  NC
                                                             PD
##
              ALIVE 0.75000000 0.20000000 0.00000000 0.00000000
              DEATH 0.25000000 0.80000000 1.00000000 1.00000000
##
##
   , , AGE = v55_59, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
                   EARLY_RESULT
## FIVE_YEAR_RESULT
                            CR
                                       PR
                                                  NC
                                                             PD
##
              ALIVE 0.75000000 0.20000000 0.00000000 0.00000000
              DEATH 0.25000000 0.80000000 1.00000000 1.00000000
##
   , , AGE = v60_64, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
##
                   EARLY_RESULT
## FIVE_YEAR_RESULT
                            CR.
                                       PR
                                                             PD
              ALIVE 0.75000000 0.20000000 0.00000000 0.00000000
##
              DEATH 0.25000000 0.80000000 1.00000000 1.00000000
##
##
##
   , , AGE = v65_69, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
                   EARLY_RESULT
                                                  NC
                                                             PD
## FIVE_YEAR_RESULT
                            CR
                                       PR
##
              ALIVE 0.75000000 0.20000000 0.00000000 0.00000000
              DEATH 0.25000000 0.80000000 1.00000000 1.00000000
##
##
   , , AGE = v70_79, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
##
                   EARLY RESULT
## FIVE_YEAR_RESULT
                            CR
                                       PR
                                                  NC
                                                             PD
              ##
```

```
##
           DEATH 0.30000000 0.80000000 1.00000000 1.00000000
##
##
  , , AGE = v80 89, CLINICAL STAGE = II1, BULKY DISEASE = YES, HISTOLOGICAL CLASSIFICATION = HIGH GRAD
##
##
               EARLY RESULT
                                          NC
## FIVE YEAR RESULT
                       CR
                                PR
           ##
           DEATH 0.30000000 0.80000000 1.00000000 1.00000000
##
##
  , , AGE = vGE90, CLINICAL_STAGE = II1, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
               EARLY_RESULT
##
## FIVE_YEAR_RESULT
                       CR.
                                PR.
           ##
           DEATH 0.30000000 0.80000000 1.00000000 1.00000000
##
  , , AGE = v10_19, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
##
               EARLY RESULT
## FIVE YEAR RESULT
                                PR
##
           DEATH 0.50000000 0.90000000 1.00000000 1.00000000
##
##
  , , AGE = v20_29, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
               EARLY RESULT
## FIVE_YEAR_RESULT
                                PR
                       CR
           ##
           DEATH 0.50000000 0.90000000 1.00000000 1.00000000
##
##
  , , AGE = v30_39, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
               EARLY_RESULT
## FIVE_YEAR_RESULT
                                PR
                       CR.
           ##
           DEATH 0.50000000 0.90000000 1.00000000 1.00000000
##
  , , AGE = v40_44, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
               EARLY_RESULT
##
## FIVE YEAR RESULT
           ##
           DEATH 0.50000000 0.90000000 1.00000000 1.00000000
##
##
  , , AGE = v45_49, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
               EARLY_RESULT
## FIVE_YEAR_RESULT
                       CR
                                PR
                                          NC
                                                   PD
##
           ##
           DEATH 0.50000000 0.90000000 1.00000000 1.00000000
##
  , , AGE = v50 54, CLINICAL STAGE = II2, BULKY DISEASE = YES, HISTOLOGICAL CLASSIFICATION = HIGH GRAD
##
```

EARLY RESULT

```
## FIVE_YEAR_RESULT
                        CR
                             PR NC
            ##
            DEATH 0.50000000 0.90000000 1.00000000 1.00000000
##
##
##
  , , AGE = v55_59, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
                EARLY RESULT
## FIVE YEAR RESULT
                        CR
                                  PR
            ##
            DEATH 0.50000000 0.90000000 1.00000000 1.00000000
##
##
  , , AGE = v60_64, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
                EARLY_RESULT
##
## FIVE_YEAR_RESULT
                        CR
                                  PR
            DEATH 0.50000000 0.90000000 1.00000000 1.00000000
##
##
  , , AGE = v65_69, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
##
                EARLY_RESULT
## FIVE YEAR RESULT
                        CR.
            ##
            DEATH 0.50000000 0.90000000 1.00000000 1.00000000
##
##
  , , AGE = v70_79, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
                EARLY_RESULT
                                  PR
                                            NC
## FIVE_YEAR_RESULT
                        CR
            ALIVE 0.45000000 0.10000000 0.00000000 0.00000000
##
            DEATH 0.55000000 0.90000000 1.00000000 1.00000000
##
  , , AGE = v80_89, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
                EARLY RESULT
## FIVE YEAR RESULT
                        CR.
                                  PR.
            ALIVE 0.45000000 0.10000000 0.00000000 0.00000000
            DEATH 0.55000000 0.90000000 1.00000000 1.00000000
##
##
  , , AGE = vGE90, CLINICAL_STAGE = II2, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
                EARLY RESULT
##
## FIVE YEAR RESULT
                        CR
                                  PR
            ALIVE 0.45000000 0.10000000 0.00000000 0.00000000
##
            DEATH 0.55000000 0.90000000 1.00000000 1.00000000
##
##
  , , AGE = v10_19, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
                EARLY_RESULT
## FIVE_YEAR_RESULT
                                  PR
                                            NC
                        CR.
            ##
            DEATH 0.60000000 0.90000000 1.00000000 1.00000000
##
##
## , , AGE = v20_29, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
```

```
##
##
               EARLY_RESULT
## FIVE YEAR RESULT
                      CR.
           ##
##
           DEATH 0.60000000 0.90000000 1.00000000 1.00000000
##
  , , AGE = v30 39, CLINICAL STAGE = III, BULKY DISEASE = YES, HISTOLOGICAL CLASSIFICATION = HIGH GRAD
##
##
               EARLY_RESULT
## FIVE_YEAR_RESULT
                      CR
                               PR
           DEATH 0.60000000 0.90000000 1.00000000 1.00000000
##
##
  , , AGE = v40_44, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
               EARLY_RESULT
## FIVE_YEAR_RESULT
                               PR
                                        NC
                      CR.
           DEATH 0.60000000 0.90000000 1.00000000 1.00000000
##
##
##
  , , AGE = v45_49, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
               EARLY RESULT
## FIVE YEAR RESULT
                      CR
                               PR
           ##
           DEATH 0.60000000 0.90000000 1.00000000 1.00000000
##
  , , AGE = v50_54, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
               EARLY_RESULT
## FIVE_YEAR_RESULT
                               PR
##
           DEATH 0.60000000 0.90000000 1.00000000 1.00000000
##
##
  , , AGE = v55_59, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
               EARLY RESULT
## FIVE_YEAR_RESULT
                      CR
                               PR
           ##
           DEATH 0.60000000 0.90000000 1.00000000 1.00000000
##
##
  , , AGE = v60_64, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
##
               EARLY_RESULT
## FIVE_YEAR_RESULT
                      CR
           ##
           DEATH 0.60000000 0.90000000 1.00000000 1.00000000
##
##
##
  , , AGE = v65_69, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
               EARLY_RESULT
##
## FIVE YEAR RESULT
                               PR
##
           ##
           DEATH 0.60000000 0.90000000 1.00000000 1.00000000
```

```
##
  , , AGE = v70_79, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
                 EARLY_RESULT
##
## FIVE YEAR RESULT
                         CR
                                   PR
            ALIVE 0.35000000 0.10000000 0.00000000 0.00000000
##
            DEATH 0.65000000 0.90000000 1.00000000 1.00000000
##
##
##
  , , AGE = v80_89, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRAD
##
##
                 EARLY_RESULT
## FIVE YEAR RESULT
                         CR
                                   PR
                                             NC
            ALIVE 0.35000000 0.10000000 0.00000000 0.00000000
            DEATH 0.65000000 0.90000000 1.00000000 1.00000000
##
##
  , , AGE = vGE90, CLINICAL_STAGE = III, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
                 EARLY RESULT
##
## FIVE YEAR RESULT
                         CR
                                   PR
            ALIVE 0.35000000 0.10000000 0.00000000 0.00000000
##
            DEATH 0.65000000 0.90000000 1.00000000 1.00000000
##
  , , AGE = v10_19, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
                 EARLY_RESULT
## FIVE_YEAR_RESULT
                         CR.
                                   PR.
            ##
            DEATH 0.60000000 0.90000000 1.00000000 1.00000000
##
##
  , , AGE = v20_29, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
                 EARLY_RESULT
                                   PR
                                             NC
            ##
            DEATH 0.60000000 0.90000000 1.00000000 1.00000000
##
##
  , , AGE = v30 39, CLINICAL STAGE = IV, BULKY DISEASE = YES, HISTOLOGICAL CLASSIFICATION = HIGH GRADE
##
                 EARLY RESULT
##
## FIVE_YEAR_RESULT
                         CR
                                   PR
            DEATH 0.60000000 0.90000000 1.00000000 1.00000000
##
##
  , , AGE = v40_44, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
##
                 EARLY_RESULT
## FIVE YEAR RESULT
                         CR.
                                   PR
            ##
            DEATH 0.60000000 0.90000000 1.00000000 1.00000000
##
##
  , , AGE = v45_49, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
                 EARLY RESULT
## FIVE YEAR RESULT
                                   PR
                                             NC
                                                       PD
```

```
##
            ##
            DEATH 0.60000000 0.90000000 1.00000000 1.00000000
##
  , , AGE = v50_54, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
                 EARLY RESULT
##
## FIVE YEAR RESULT
                         CR
##
            ##
            DEATH 0.60000000 0.90000000 1.00000000 1.00000000
##
  , , AGE = v55_59, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
                 EARLY_RESULT
## FIVE_YEAR_RESULT
                         CR
                                   PR
                                             NC
                                                       PΠ
            ##
##
            DEATH 0.60000000 0.90000000 1.00000000 1.00000000
##
  , , AGE = v60_64, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
                 EARLY RESULT
## FIVE_YEAR_RESULT
                         CR.
                                   PR.
                                             NC.
                                                       ΡD
            ##
            DEATH 0.60000000 0.90000000 1.00000000 1.00000000
##
##
##
  , , AGE = v65 69, CLINICAL STAGE = IV, BULKY DISEASE = YES, HISTOLOGICAL CLASSIFICATION = HIGH GRADE
##
                 EARLY_RESULT
##
## FIVE_YEAR_RESULT
                         CR
                                   PR
            ##
            DEATH 0.60000000 0.90000000 1.00000000 1.00000000
##
##
##
  , , AGE = v70_79, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
                 EARLY_RESULT
## FIVE YEAR RESULT
                                   PR.
            ALIVE 0.35000000 0.10000000 0.00000000 0.00000000
##
##
            DEATH 0.65000000 0.90000000 1.00000000 1.00000000
##
  , , AGE = v80_89, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
##
                 EARLY RESULT
## FIVE YEAR RESULT
                         CR.
                                   PR.
            ALIVE 0.35000000 0.10000000 0.00000000 0.00000000
##
##
            DEATH 0.65000000 0.90000000 1.00000000 1.00000000
  , , AGE = vGE90, CLINICAL_STAGE = IV, BULKY_DISEASE = YES, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
                 EARLY_RESULT
## FIVE_YEAR_RESULT
                         CR
                                   PR.
##
            ALIVE 0.35000000 0.10000000 0.00000000 0.00000000
            DEATH 0.65000000 0.90000000 1.00000000 1.00000000
##
##
  , , AGE = v10_19, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
```

```
EARLY RESULT
##
## FIVE_YEAR_RESULT
                                                   NC
                                                               PD
                             CR
                                        PR
##
              ALIVE 0.85000002 0.40000000 0.00000000 0.00000000
              DEATH 0.14999998 0.60000000 1.00000000 1.00000000
##
##
   , , AGE = v20 29, CLINICAL STAGE = I, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = HIGH GRADE,
##
##
##
                   EARLY RESULT
## FIVE_YEAR_RESULT
                             CR
                                        PR
                                                   NC
                                                               חק
              ALIVE 0.85000002 0.40000000 0.00000000 0.00000000
##
##
              DEATH 0.14999998 0.60000000 1.00000000 1.00000000
##
   , , AGE = v30_39, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
##
                   EARLY_RESULT
## FIVE_YEAR_RESULT
                             CR
                                        PR
                                                   NC
                                                               PD
              ALIVE 0.85000002 0.40000000 0.00000000 0.00000000
##
##
              DEATH 0.14999998 0.60000000 1.00000000 1.00000000
##
   , , AGE = v40_44, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
                   EARLY RESULT
##
                                                               PD
## FIVE_YEAR_RESULT
                             CR
                                                   NC
                                        PR
              ALIVE 0.85000002 0.40000000 0.00000000 0.00000000
##
              DEATH 0.14999998 0.60000000 1.00000000 1.00000000
##
   , , AGE = v45_49, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
                   EARLY_RESULT
##
## FIVE_YEAR_RESULT
                                        PR
                                                   NC
                                                               PD
                             CR.
##
              ALIVE 0.85000002 0.40000000 0.00000000 0.00000000
##
              DEATH 0.14999998 0.60000000 1.00000000 1.00000000
##
    , AGE = v50_54, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
                   EARLY RESULT
##
## FIVE YEAR RESULT
                                        PR.
                                                   NC
                                                               PD
              ALIVE 0.85000002 0.40000000 0.00000000 0.00000000
##
              DEATH 0.14999998 0.60000000 1.00000000 1.00000000
##
##
   , , AGE = v55_59, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
                   EARLY RESULT
##
## FIVE_YEAR_RESULT
                                        PR
                                                   NC.
                                                               ΡD
                             CR.
              ALIVE 0.85000002 0.40000000 0.00000000 0.00000000
##
              DEATH 0.14999998 0.60000000 1.00000000 1.00000000
##
##
   , , AGE = v60_64, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
                   EARLY_RESULT
                                                               PD
## FIVE_YEAR_RESULT
                             CR
                                        PR
                                                   NC
##
              ALIVE 0.85000002 0.40000000 0.00000000 0.00000000
##
              DEATH 0.14999998 0.60000000 1.00000000 1.00000000
```

```
, , AGE = v65_69, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
                EARLY RESULT
                                          NC
## FIVE_YEAR_RESULT
                        CR
                                 PR
##
            ALIVE 0.85000002 0.40000000 0.00000000 0.00000000
           DEATH 0.14999998 0.60000000 1.00000000 1.00000000
##
##
  , , AGE = v70_79, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
##
                EARLY_RESULT
  FIVE_YEAR_RESULT
                        CR
                                 PR
                                          NC.
                                                    PD
            ##
##
           DEATH 0.20000000 0.60000000 1.00000000 1.00000000
##
  , , AGE = v80_89, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
                EARLY_RESULT
##
## FIVE_YEAR_RESULT
                                          NC
                                                    PD
                        CR.
           ##
##
           DEATH 0.20000000 0.60000000 1.00000000 1.00000000
##
  , , AGE = vGE90, CLINICAL_STAGE = I, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE, I
##
##
##
                EARLY RESULT
## FIVE_YEAR_RESULT
                        CR.
                                 PR.
                                          NC
                                                    PD
##
            DEATH 0.20000000 0.60000000 1.00000000 1.00000000
##
##
  , , AGE = v10_19, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
##
                EARLY_RESULT
## FIVE_YEAR_RESULT
                        CR
                                 PR
                                          NC
                                                    PD
##
            DEATH 0.20000000 0.60000000 1.00000000 1.00000000
##
  , , AGE = v20_29, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
                EARLY_RESULT
##
                                                    PD
## FIVE_YEAR_RESULT
                                 PR
           ##
           DEATH 0.20000000 0.60000000 1.00000000 1.00000000
##
##
##
  , , AGE = v30_39, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
                EARLY_RESULT
                                          NC
                                                    PD
## FIVE_YEAR_RESULT
                        CR
                                 PR
##
            DEATH 0.20000000 0.60000000 1.00000000 1.00000000
##
##
  , , AGE = v40_44, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
##
                EARLY RESULT
## FIVE_YEAR_RESULT
                        CR
                                 PR
                                          NC
                                                    PD
           ##
```

```
##
            DEATH 0.20000000 0.60000000 1.00000000 1.00000000
##
##
  , , AGE = v45 49, CLINICAL STAGE = II1, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = HIGH GRADE
##
##
                 EARLY RESULT
                                             NC
## FIVE YEAR RESULT
                         CR
                                   PR
            ##
            DEATH 0.20000000 0.60000000 1.00000000 1.00000000
##
##
  , , AGE = v50_54, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
                 EARLY_RESULT
##
## FIVE_YEAR_RESULT
                         CR.
                                   PR.
            ##
            DEATH 0.20000000 0.60000000 1.00000000 1.00000000
##
##
  , , AGE = v55_59, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
##
                EARLY RESULT
## FIVE YEAR RESULT
                                   PR
                                             NC
##
            DEATH 0.20000000 0.60000000 1.00000000 1.00000000
##
##
  , , AGE = v60_64, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
                 EARLY RESULT
## FIVE_YEAR_RESULT
                                   PR
                                             NC
                         CR.
            ##
            DEATH 0.20000000 0.60000000 1.00000000 1.00000000
##
##
##
  , , AGE = v65_69, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
                 EARLY_RESULT
## FIVE_YEAR_RESULT
                                   PR
                         CR.
            ##
            DEATH 0.20000000 0.60000000 1.00000000 1.00000000
##
  , , AGE = v70_79, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
                 EARLY_RESULT
##
## FIVE YEAR RESULT
            ALIVE 0.75000000 0.40000000 0.00000000 0.00000000
##
            DEATH 0.25000000 0.60000000 1.00000000 1.00000000
##
##
  , , AGE = v80_89, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
                 EARLY RESULT
## FIVE_YEAR_RESULT
                         CR
                                   PR
                                             NC
                                                      PD
##
            ALIVE 0.75000000 0.40000000 0.00000000 0.00000000
##
            DEATH 0.25000000 0.60000000 1.00000000 1.00000000
##
  , , AGE = vGE90, CLINICAL_STAGE = II1, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
                 EARLY RESULT
```

```
## FIVE_YEAR_RESULT
                       CR
                            PR NC
           ALIVE 0.75000000 0.40000000 0.00000000 0.00000000
##
           DEATH 0.25000000 0.60000000 1.00000000 1.00000000
##
##
##
  , , AGE = v10_19, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
               EARLY RESULT
## FIVE YEAR RESULT
                       CR
                                 PR
           ##
           DEATH 0.40000000 0.500000000 1.000000000 1.000000000
##
##
  , , AGE = v20_29, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
                EARLY_RESULT
##
## FIVE_YEAR_RESULT
                       CR
                                 PR
           DEATH 0.40000000 0.500000000 1.000000000 1.000000000
##
##
  , , AGE = v30_39, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
##
               EARLY_RESULT
## FIVE YEAR RESULT
           ##
           DEATH 0.40000000 0.500000000 1.00000000 1.00000000
##
##
  , , AGE = v40_44, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
               EARLY_RESULT
                                 PR
                                          NC
## FIVE_YEAR_RESULT
                       CR
           ##
           DEATH 0.40000000 0.500000000 1.00000000 1.000000000
##
  , , AGE = v45_49, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
               EARLY RESULT
## FIVE_YEAR_RESULT
                       CR.
                                PR.
           DEATH 0.40000000 0.500000000 1.000000000 1.000000000
##
##
  , , AGE = v50_54, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
               EARLY RESULT
##
## FIVE YEAR RESULT
                       CR
                                 PR
           ##
           DEATH 0.40000000 0.500000000 1.00000000 1.000000000
##
  , , AGE = v55_59, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
##
               EARLY_RESULT
## FIVE_YEAR_RESULT
                                 PR
                                          NC
                       CR.
           ##
           DEATH 0.40000000 0.500000000 1.000000000 1.000000000
##
##
## , , AGE = v60_64, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
```

```
##
##
               EARLY_RESULT
## FIVE YEAR RESULT
                      CR.
           ##
##
           DEATH 0.40000000 0.500000000 1.000000000 1.000000000
##
  , , AGE = v65 69, CLINICAL STAGE = II2, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = HIGH GRADE
##
##
               EARLY_RESULT
## FIVE_YEAR_RESULT
                      CR
                               PR
                                        NC
           DEATH 0.40000000 0.500000000 1.00000000 1.000000000
##
##
  , , AGE = v70_79, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
               EARLY_RESULT
                                        NC
## FIVE_YEAR_RESULT
                      CR
                               PR
           DEATH 0.45000000 0.500000000 1.00000000 1.00000000
##
##
##
  , , AGE = v80_89, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
               EARLY RESULT
## FIVE YEAR RESULT
                               PR
           ##
           DEATH 0.45000000 0.50000000 1.00000000 1.00000000
##
  , , AGE = vGE90, CLINICAL_STAGE = II2, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
               EARLY_RESULT
## FIVE_YEAR_RESULT
                               PR
##
           DEATH 0.45000000 0.50000000 1.00000000 1.00000000
##
##
  , , AGE = v10_19, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
               EARLY RESULT
## FIVE_YEAR_RESULT
                      CR.
                               PR.
           ##
           DEATH 0.50000000 0.50000000 1.00000000 1.00000000
##
##
  , , AGE = v20_29, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
##
               EARLY_RESULT
## FIVE_YEAR_RESULT
                      CR
           ##
           DEATH 0.50000000 0.50000000 1.00000000 1.00000000
##
##
##
  , , AGE = v30_39, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
               EARLY_RESULT
##
## FIVE YEAR RESULT
                      CR
                               PR
##
           DEATH 0.50000000 0.50000000 1.00000000 1.00000000
##
```

```
##
  , , AGE = v40_44, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
               EARLY_RESULT
##
## FIVE YEAR RESULT
                       CR
                                PR
           ##
           DEATH 0.50000000 0.50000000 1.00000000 1.00000000
##
##
##
  , , AGE = v45_49, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
               EARLY_RESULT
## FIVE YEAR RESULT
                       CR
                                PR
                                         NC
           DEATH 0.50000000 0.50000000 1.00000000 1.00000000
##
##
  , , AGE = v50_54, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
               EARLY RESULT
##
## FIVE YEAR RESULT
                       CR
                                PR
           ##
           DEATH 0.50000000 0.50000000 1.00000000 1.00000000
##
  , , AGE = v55_59, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
               EARLY RESULT
## FIVE_YEAR_RESULT
                       CR.
                                PR
           ##
           DEATH 0.50000000 0.50000000 1.00000000 1.00000000
##
##
  , , AGE = v60_64, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
               EARLY_RESULT
                                PR
                                         NC
           ##
           DEATH 0.50000000 0.50000000 1.00000000 1.00000000
##
##
  , , AGE = v65 69, CLINICAL STAGE = III, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = HIGH GRADE
##
               EARLY RESULT
##
## FIVE_YEAR_RESULT
                                PR
                       CR
           DEATH 0.50000000 0.50000000 1.00000000 1.00000000
##
##
  , , AGE = v70_79, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
##
                EARLY_RESULT
## FIVE YEAR RESULT
                       CR.
                                PR
           ##
           DEATH 0.55000000 0.50000000 1.00000000 1.00000000
##
##
  , , AGE = v80_89, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE
##
               EARLY RESULT
## FIVE YEAR RESULT
                                PR
                                         NC
                                                   PD
```

```
##
           ##
           DEATH 0.55000000 0.50000000 1.00000000 1.00000000
##
  , , AGE = vGE90, CLINICAL_STAGE = III, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
               EARLY RESULT
##
## FIVE YEAR RESULT
                                         NC
##
           ##
           DEATH 0.55000000 0.50000000 1.00000000 1.00000000
##
##
  , , AGE = v10_19, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
               EARLY_RESULT
## FIVE_YEAR_RESULT
                       CR
                                PR
                                         NC
                                                  PΠ
           ##
##
           DEATH 0.50000000 0.50000000 1.00000000 1.00000000
##
  , , AGE = v20_29, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
               EARLY RESULT
## FIVE_YEAR_RESULT
                       CR.
                                PR.
                                         NC.
                                                  ΡD
           ##
           DEATH 0.50000000 0.50000000 1.00000000 1.00000000
##
##
##
  , , AGE = v30 39, CLINICAL STAGE = IV, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = HIGH GRADE,
##
               EARLY_RESULT
##
## FIVE_YEAR_RESULT
                       CR
                                PR
           ##
           DEATH 0.50000000 0.50000000 1.00000000 1.00000000
##
##
##
  , , AGE = v40_44, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
               EARLY_RESULT
## FIVE YEAR RESULT
                                PR.
           ##
##
           DEATH 0.50000000 0.50000000 1.00000000 1.00000000
##
  , , AGE = v45_49, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
##
               EARLY RESULT
## FIVE YEAR RESULT
                       CR.
                                PR.
           ##
           DEATH 0.50000000 0.50000000 1.00000000 1.00000000
##
  , , AGE = v50_54, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
               EARLY_RESULT
## FIVE_YEAR_RESULT
                       CR
                                PR.
##
           DEATH 0.50000000 0.50000000 1.00000000 1.00000000
##
##
  , , AGE = v55_59, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
```

```
EARLY_RESULT
##
                                           NC
                                                    PD
## FIVE_YEAR_RESULT
                        CR
                                 PR.
            ##
            DEATH 0.50000000 0.50000000 1.00000000 1.00000000
##
##
  , , AGE = v60 64, CLINICAL STAGE = IV, BULKY DISEASE = NO, HISTOLOGICAL CLASSIFICATION = HIGH GRADE,
##
##
##
                EARLY RESULT
## FIVE_YEAR_RESULT
                        CR
                                 PR
                                           NC
            ##
##
            DEATH 0.50000000 0.50000000 1.00000000 1.00000000
##
  , , AGE = v65_69, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
##
                EARLY_RESULT
## FIVE_YEAR_RESULT
                        CR
                                 PR
                                           NC
                                                    PD
            ##
##
            DEATH 0.50000000 0.50000000 1.00000000 1.00000000
##
##
  , , AGE = v70_79, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
                EARLY RESULT
##
                                           NC
                                                    PD
## FIVE_YEAR_RESULT
                        CR
                                 PR
            ##
            DEATH 0.55000000 0.50000000 1.00000000 1.00000000
##
##
  , , AGE = v80_89, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
                EARLY_RESULT
##
## FIVE_YEAR_RESULT
                        CR
                                 PR
                                           NC
                                                    PD
##
            ##
            DEATH 0.55000000 0.50000000 1.00000000 1.00000000
##
  , , AGE = vGE90, CLINICAL_STAGE = IV, BULKY_DISEASE = NO, HISTOLOGICAL_CLASSIFICATION = HIGH_GRADE,
##
##
                EARLY RESULT
##
## FIVE YEAR RESULT
                                 PR
                                           NC
                                                    PD
            ##
            DEATH 0.55000000 0.50000000 1.00000000 1.00000000
##
##
##
    Parameters of node HELICOBACTER_PYLORI (multinomial distribution)
##
##
  Conditional probability table:
##
    ABSENT PRESENT
##
     0.15
            0.85
##
##
##
    Parameters of node BM_DEPRESSION (multinomial distribution)
##
## Conditional probability table:
##
##
  , AGE = v10_19
##
##
             CT RT SCHEDULE
```

```
## BM DEPRESSION NONE RT CT CT NEXT RT
##
     NO 1.00000000 0.95000000 0.89999998 0.89999999
##
           YES 0.00000000 0.05000000 0.10000002 0.10000001
##
  , , AGE = v20_29
##
##
              CT_RT_SCHEDULE
##
                           RT CT CT NEXT RT
## BM DEPRESSION NONE
           NO 1.00000000 0.95000001 0.89999998 0.90000000
##
           YES 0.00000000 0.04999999 0.10000002 0.10000000
##
##
  , AGE = v30_39
##
##
##
              CT_RT_SCHEDULE
## BM_DEPRESSION NONE
                                 RT CT CT_NEXT_RT
##
           NO 1.00000000 0.95000001 0.89999998 0.80000000
           YES 0.00000000 0.04999999 0.10000002 0.20000000
##
##
  , , AGE = v40_44
##
##
##
              CT_RT_SCHEDULE
## BM DEPRESSION NONE
                                           CT CT NEXT RT
          NO 1.00000000 0.90000000 0.80000000 0.70000000
##
           YES 0.00000000 0.10000000 0.20000000 0.30000000
##
##
##
  , , AGE = v45_{49}
##
              CT_RT_SCHEDULE
##
## BM_DEPRESSION NONE
                                 RT
                                           CT CT_NEXT_RT
           ND 1.00000000 0.90000000 0.80000000 0.70000001
##
           YES 0.00000000 0.10000000 0.20000000 0.29999999
##
  , , AGE = v50_54
##
##
##
              CT_RT_SCHEDULE
## BM DEPRESSION NONE
                                RT CT CT NEXT RT
           NO 1.00000000 0.85000000 0.80000000 0.60000000
##
           YES 0.00000000 0.15000000 0.20000000 0.40000000
##
  , , AGE = v55_59
##
##
              CT RT SCHEDULE
## BM DEPRESSION NONE
                               RT CT CT NEXT RT
           NO 1.00000000 0.80000000 0.70000000 0.50000000
##
           YES 0.00000000 0.20000000 0.30000000 0.50000000
##
##
  , , AGE = v60_64
##
##
              CT_RT_SCHEDULE
## BM_DEPRESSION NONE
                                RT CT CT_NEXT_RT
##
           NO 1.00000000 0.80000000 0.60000000 0.40000000
           YES 0.00000000 0.20000000 0.40000000 0.60000000
##
##
## , AGE = v65_69
```

```
##
##
                CT_RT_SCHEDULE
## BM DEPRESSION
                       NONE
                                                CT CT NEXT RT
##
             NO 1.00000000 0.60000000 0.50000000 0.20000000
##
             YES 0.00000000 0.40000000 0.50000000 0.80000000
##
   , , AGE = v70_{79}
##
##
##
                CT_RT_SCHEDULE
##
  BM_DEPRESSION
                       NONE
                                     RT
                                                CT CT_NEXT_RT
##
             NO 1.00000000 0.40000000 0.29999999 0.10000000
             YES 0.00000000 0.60000000 0.70000001 0.90000000
##
##
##
   , AGE = v80_89
##
##
                CT_RT_SCHEDULE
## BM_DEPRESSION
                       NONE
                                     RT
                                                CT CT_NEXT_RT
             NO 1.00000000 0.35000000 0.10000002 0.05000000
             YES 0.00000000 0.65000000 0.89999998 0.95000000
##
##
##
   , , AGE = vGE90
##
                CT_RT_SCHEDULE
##
## BM DEPRESSION
                       NONE
                                     RT
                                                CT CT NEXT RT
##
             NO 1.00000000 0.30000000 0.10000002 0.05000000
             YES 0.00000000 0.70000000 0.89999998 0.95000000
test <- bn.net(manual)
plot(test)
```

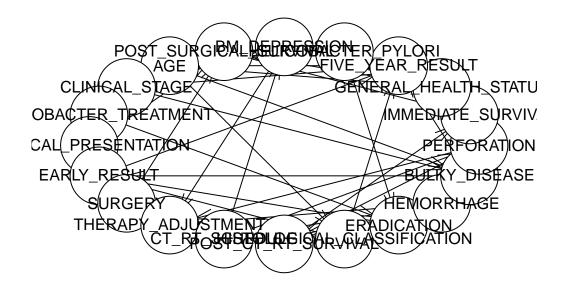
4 develop special purpose BN (NBN or TAN, see .2)

```
netnb = naive.bayes(a,"BC")
plot(netnb)

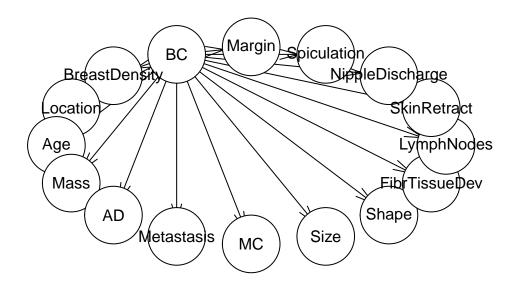
netnb2 <- bn.fit(netnb,a)
#netnb2
#score(netnb,a)
#score(netnb2)
#score(a,BC_cbl)</pre>
```

4.1 compare BN and SPBN with manually constructed network in terms of network structure, goodnes of fit scores (lkikelohood,...) and accuracy measures such as misclassification error and ROC (B.2)

```
netnb2 <- bn.fit(netnb,a)
netnb2</pre>
```



```
##
##
     Bayesian network parameters
##
     Parameters of node BC (multinomial distribution)
##
##
##
   Conditional probability table:
##
     Insitu Invasive
##
    0.14190 0.23615 0.62195
##
##
     Parameters of node BreastDensity (multinomial distribution)
##
##
##
  Conditional probability table:
##
##
                BC
## BreastDensity
                    Insitu Invasive
##
          high
                 0.3009161 0.3000212 0.3021143
##
                 0.1948555 0.1977557 0.2011416
          medium 0.5042283 0.5022232 0.4967441
##
##
     Parameters of node Location (multinomial distribution)
##
##
## Conditional probability table:
##
##
                BC
```



```
Insitu Invasive
## Location
##
    LolwOutQuad 0.2170543 0.2297269 0.2669829
##
     LowInQuad
                 0.1976744 0.2576752 0.2602299
                 0.2663848 0.2610629 0.2451966
##
     UpInQuad
     UpOutQuad
                 0.3188865 0.2515350 0.2275906
##
##
     Parameters of node Age (multinomial distribution)
##
##
## Conditional probability table:
##
          BC
##
## Age
                Insitu
                          Invasive
                                             No
##
     <35
           0.013389711 0.008680923 0.160784629
##
           0.136715997 0.131695956 0.156443444
     35-49 0.311134602 0.168536947 0.263767184
##
##
     50-74 0.538759690 0.691086174 0.419004743
##
##
    Parameters of node Mass (multinomial distribution)
##
## Conditional probability table:
##
##
           BC
## Mass
               Insitu Invasive
##
     Benign 0.4090909 0.1482109 0.1105394
    Malign 0.3523608 0.6641965 0.0000000
##
```

```
##
     No
            0.2385483 0.1875926 0.8894606
##
     Parameters of node AD (multinomial distribution)
##
##
## Conditional probability table:
##
##
        BC
## AD
             Insitu
                      Invasive
                                        No
##
     No 0.70366455 0.54710989 0.94806656
     Yes 0.29633545 0.45289011 0.05193344
##
##
##
     Parameters of node Metastasis (multinomial distribution)
##
## Conditional probability table:
##
##
             BC
## Metastasis
                 Insitu Invasive
##
          no 0.8565891 0.1037476 1.0000000
##
          yes 0.1434109 0.8962524 0.0000000
##
##
     Parameters of node MC (multinomial distribution)
##
## Conditional probability table:
##
##
        BC
             Insitu
                      Invasive
##
     No 0.48731501 0.53080669 0.97202347
     Yes 0.51268499 0.46919331 0.02797653
##
##
     Parameters of node Size (multinomial distribution)
##
##
## Conditional probability table:
##
##
          BC
## Size
               Insitu
                        Invasive
     <1cm 0.37702607 0.39254711 0.90248412
##
##
     >3cm 0.31606765 0.19839085 0.06961974
##
     1-3cm 0.30690627 0.40906204 0.02789613
##
##
     Parameters of node Shape (multinomial distribution)
## Conditional probability table:
##
##
              BC
                    Insitu
## Shape
                               Invasive
     Irregular 0.278012685 0.501376244 0.006511777
##
               0.263918252 0.194791446 0.895329207
##
     Other
##
     Oval
               0.152924595 0.137836121 0.026047110
               0.305144468 0.165996189 0.072111906
##
     Round
##
##
     Parameters of node FibrTissueDev (multinomial distribution)
##
## Conditional probability table:
##
```

```
## FibrTissueDev
                    Insitu Invasive
##
             No 0.5362932 0.4632649 0.6325267
             Yes 0.4637068 0.5367351 0.3674733
##
##
     Parameters of node LymphNodes (multinomial distribution)
##
##
## Conditional probability table:
##
##
             BC
## LymphNodes
                  Insitu
                           Invasive
          no 0.80056378 0.23163244 0.90320765
##
##
          yes 0.19943622 0.76836756 0.09679235
##
##
     Parameters of node SkinRetract (multinomial distribution)
## Conditional probability table:
##
              BC
##
## SkinRetract
                  Insitu Invasive
##
           No 0.5574348 0.3823841 0.8419487
##
           Yes 0.4425652 0.6176159 0.1580513
##
     Parameters of node NippleDischarge (multinomial distribution)
##
##
## Conditional probability table:
##
##
## NippleDischarge
                      Insitu Invasive
               No 0.5821001 0.3900064 0.8455664
##
               Yes 0.4178999 0.6099936 0.1544336
##
##
##
     Parameters of node Spiculation (multinomial distribution)
##
## Conditional probability table:
##
##
              BC
## Spiculation
                  Insitu Invasive
           No 0.5775194 0.5386407 0.6277836
##
##
           Yes 0.4224806 0.4613593 0.3722164
##
##
     Parameters of node Margin (multinomial distribution)
##
## Conditional probability table:
##
                 BC
##
## Margin
                     Insitu Invasive
     Ill-defined 0.5680056 0.7183993 0.3763968
     Well-defined 0.4319944 0.2816007 0.6236032
score(netnb,a)
```

## [1] -214925.2

```
nbncv <- bn.cv(a,netnb,loss="log1",loss.args = list(target="BC"),debug=T)</pre>
## Warning in check.unused.args(extra.args, valid.args): unused argument(s):
## target
## * splitting 20000 data in 10 subsets.
## -----
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
    > log-likelihood loss for node BC is 0.919676.
##
    > log-likelihood loss for node BreastDensity is 1.039007.
##
    > log-likelihood loss for node Location is 1.381308.
##
    > log-likelihood loss for node Age is 1.167999.
##
    > log-likelihood loss for node Mass is 0.578246.
##
    > log-likelihood loss for node AD is 0.387564.
##
    > log-likelihood loss for node Metastasis is 0.124055.
##
    > log-likelihood loss for node MC is 0.362297.
##
    > log-likelihood loss for node Size is 0.638856.
##
    > log-likelihood loss for node Shape is 0.746732.
##
    > log-likelihood loss for node FibrTissueDev is 0.660327.
##
    > log-likelihood loss for node LymphNodes is 0.392187.
##
    > log-likelihood loss for node SkinRetract is 0.519727.
    > log-likelihood loss for node NippleDischarge is 0.521642.
##
##
    > log-likelihood loss for node Spiculation is 0.667961.
##
    > log-likelihood loss for node Margin is 0.654901.
    @ total loss is 10.76249 .
## -----
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
##
    > log-likelihood loss for node BC is 0.893516.
    > log-likelihood loss for node BreastDensity is 1.036432.
##
##
    > log-likelihood loss for node Location is 1.382471.
##
    > log-likelihood loss for node Age is 1.155939.
##
    > log-likelihood loss for node Mass is 0.564805.
##
    > log-likelihood loss for node AD is 0.364705.
##
    > log-likelihood loss for node Metastasis is 0.145952.
##
    > log-likelihood loss for node MC is 0.316122.
##
    > log-likelihood loss for node Size is 0.631846.
##
    > log-likelihood loss for node Shape is 0.729379.
##
    > log-likelihood loss for node FibrTissueDev is 0.671738.
##
    > log-likelihood loss for node LymphNodes is 0.407832.
##
    > log-likelihood loss for node SkinRetract is 0.534846.
##
    > log-likelihood loss for node NippleDischarge is 0.533331.
##
    > log-likelihood loss for node Spiculation is 0.682359.
##
    > log-likelihood loss for node Margin is 0.653261.
##
    @ total loss is 10.70453 .
## --
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
    > log-likelihood loss for node BC is 0.915643.
##
##
    > log-likelihood loss for node BreastDensity is 1.022659.
    > log-likelihood loss for node Location is 1.382281.
##
    > log-likelihood loss for node Age is 1.142923.
```

```
##
     > log-likelihood loss for node Mass is 0.568072.
##
     > log-likelihood loss for node AD is 0.370244.
     > log-likelihood loss for node Metastasis is 0.148668.
##
##
     > log-likelihood loss for node MC is 0.355863.
##
     > log-likelihood loss for node Size is 0.627118.
##
     > log-likelihood loss for node Shape is 0.740264.
##
     > log-likelihood loss for node FibrTissueDev is 0.657433.
##
     > log-likelihood loss for node LymphNodes is 0.377287.
##
     > log-likelihood loss for node SkinRetract is 0.505885.
##
     > log-likelihood loss for node NippleDischarge is 0.495894.
     > log-likelihood loss for node Spiculation is 0.657956.
##
     > log-likelihood loss for node Margin is 0.646266.
##
     @ total loss is 10.61446 .
  ______
##
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
##
     > log-likelihood loss for node BC is 0.915657.
##
     > log-likelihood loss for node BreastDensity is 1.026515.
##
     > log-likelihood loss for node Location is 1.383520.
##
     > log-likelihood loss for node Age is 1.138271.
##
     > log-likelihood loss for node Mass is 0.576120.
##
     > log-likelihood loss for node AD is 0.372653.
##
     > log-likelihood loss for node Metastasis is 0.127947.
##
     > log-likelihood loss for node MC is 0.371117.
##
     > log-likelihood loss for node Size is 0.649744.
##
     > log-likelihood loss for node Shape is 0.767044.
##
     > log-likelihood loss for node FibrTissueDev is 0.673687.
##
     > log-likelihood loss for node LymphNodes is 0.374521.
##
     > log-likelihood loss for node SkinRetract is 0.547325.
##
     > log-likelihood loss for node NippleDischarge is 0.510130.
##
     > log-likelihood loss for node Spiculation is 0.670490.
##
     > log-likelihood loss for node Margin is 0.649255.
##
     @ total loss is 10.75399 .
##
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
##
     > log-likelihood loss for node BC is 0.900075.
##
     > log-likelihood loss for node BreastDensity is 1.016240.
##
     > log-likelihood loss for node Location is 1.381208.
##
     > log-likelihood loss for node Age is 1.159611.
     > log-likelihood loss for node Mass is 0.537845.
##
##
     > log-likelihood loss for node AD is 0.370768.
##
     > log-likelihood loss for node Metastasis is 0.137597.
##
     > log-likelihood loss for node MC is 0.321132.
##
     > log-likelihood loss for node Size is 0.605181.
##
     > log-likelihood loss for node Shape is 0.703885.
##
     > log-likelihood loss for node FibrTissueDev is 0.663016.
##
     > log-likelihood loss for node LymphNodes is 0.375928.
##
     > log-likelihood loss for node SkinRetract is 0.502679.
##
     > log-likelihood loss for node NippleDischarge is 0.517212.
##
     > log-likelihood loss for node Spiculation is 0.662827.
##
     > log-likelihood loss for node Margin is 0.641850.
     @ total loss is 10.49705 .
```

```
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
    > log-likelihood loss for node BC is 0.925814.
##
    > log-likelihood loss for node BreastDensity is 1.031562.
##
    > log-likelihood loss for node Location is 1.387262.
##
    > log-likelihood loss for node Age is 1.161452.
##
    > log-likelihood loss for node Mass is 0.599065.
##
    > log-likelihood loss for node AD is 0.381506.
##
    > log-likelihood loss for node Metastasis is 0.142968.
##
    > log-likelihood loss for node MC is 0.358106.
##
    > log-likelihood loss for node Size is 0.662343.
##
    > log-likelihood loss for node Shape is 0.772633.
##
    > log-likelihood loss for node FibrTissueDev is 0.684539.
##
    > log-likelihood loss for node LymphNodes is 0.401797.
##
    > log-likelihood loss for node SkinRetract is 0.543047.
##
    > log-likelihood loss for node NippleDischarge is 0.539979.
##
    > log-likelihood loss for node Spiculation is 0.681120.
##
    > log-likelihood loss for node Margin is 0.666037.
    @ total loss is 10.93923 .
##
## -----
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
    > log-likelihood loss for node BC is 0.902563.
##
    > log-likelihood loss for node BreastDensity is 1.033173.
##
##
    > log-likelihood loss for node Location is 1.384384.
##
    > log-likelihood loss for node Age is 1.145189.
##
    > log-likelihood loss for node Mass is 0.571342.
##
    > log-likelihood loss for node AD is 0.384618.
##
    > log-likelihood loss for node Metastasis is 0.137036.
##
    > log-likelihood loss for node MC is 0.317559.
##
    > log-likelihood loss for node Size is 0.620296.
##
    > log-likelihood loss for node Shape is 0.731096.
##
    > log-likelihood loss for node FibrTissueDev is 0.673215.
##
    > log-likelihood loss for node LymphNodes is 0.422698.
##
    > log-likelihood loss for node SkinRetract is 0.517889.
##
    > log-likelihood loss for node NippleDischarge is 0.525297.
##
    > log-likelihood loss for node Spiculation is 0.670230.
##
    > log-likelihood loss for node Margin is 0.651243.
    @ total loss is 10.68783 .
  _____
##
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
    > log-likelihood loss for node BC is 0.906352.
##
##
    > log-likelihood loss for node BreastDensity is 1.036702.
##
    > log-likelihood loss for node Location is 1.384504.
##
    > log-likelihood loss for node Age is 1.190130.
##
    > log-likelihood loss for node Mass is 0.571520.
##
    > log-likelihood loss for node AD is 0.359120.
##
    > log-likelihood loss for node Metastasis is 0.143469.
##
    > log-likelihood loss for node MC is 0.318990.
##
    > log-likelihood loss for node Size is 0.654042.
##
    > log-likelihood loss for node Shape is 0.746246.
##
    > log-likelihood loss for node FibrTissueDev is 0.668176.
    > log-likelihood loss for node LymphNodes is 0.394714.
```

```
##
     > log-likelihood loss for node SkinRetract is 0.538348.
##
     > log-likelihood loss for node NippleDischarge is 0.527464.
##
     > log-likelihood loss for node Spiculation is 0.670680.
     > log-likelihood loss for node Margin is 0.641574.
##
##
     @ total loss is 10.75203 .
## ----
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
##
     > log-likelihood loss for node BC is 0.932720.
##
     > log-likelihood loss for node BreastDensity is 1.039560.
##
     > log-likelihood loss for node Location is 1.380445.
##
     > log-likelihood loss for node Age is 1.163840.
##
     > log-likelihood loss for node Mass is 0.594058.
##
     > log-likelihood loss for node AD is 0.376309.
##
     > log-likelihood loss for node Metastasis is 0.143458.
##
     > log-likelihood loss for node MC is 0.338360.
##
     > log-likelihood loss for node Size is 0.655879.
##
     > log-likelihood loss for node Shape is 0.757259.
##
     > log-likelihood loss for node FibrTissueDev is 0.674574.
##
     > log-likelihood loss for node LymphNodes is 0.411048.
##
     > log-likelihood loss for node SkinRetract is 0.520826.
##
     > log-likelihood loss for node NippleDischarge is 0.529759.
##
     > log-likelihood loss for node Spiculation is 0.668189.
     > log-likelihood loss for node Margin is 0.648054.
##
     @ total loss is 10.83434 .
##
  _____
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
     > log-likelihood loss for node BC is 0.922295.
##
##
     > log-likelihood loss for node BreastDensity is 1.019785.
##
     > log-likelihood loss for node Location is 1.382629.
##
     > log-likelihood loss for node Age is 1.161628.
##
     > log-likelihood loss for node Mass is 0.579984.
##
     > log-likelihood loss for node AD is 0.392958.
##
     > log-likelihood loss for node Metastasis is 0.120606.
##
     > log-likelihood loss for node MC is 0.352155.
##
     > log-likelihood loss for node Size is 0.648921.
##
     > log-likelihood loss for node Shape is 0.744615.
##
     > log-likelihood loss for node FibrTissueDev is 0.675616.
##
     > log-likelihood loss for node LymphNodes is 0.408755.
     > log-likelihood loss for node SkinRetract is 0.530315.
##
##
     > log-likelihood loss for node NippleDischarge is 0.520983.
     > log-likelihood loss for node Spiculation is 0.671986.
##
##
     > log-likelihood loss for node Margin is 0.642909.
     @ total loss is 10.77614 .
##
## * summary of the observed values for the loss function:
##
      Min. 1st Qu. Median
                             Mean 3rd Qu.
##
     10.50 10.69 10.75 10.73
                                   10.77
                                            10.94
```

 ${\tt nbncv}$ 

##

## k-fold cross-validation for Bayesian networks

```
##
##
     target network structure:
##
      [Naive Bayes Classifier]
     number of subsets:
##
                                             10
##
     loss function:
                                             Log-Likelihood Loss (disc.)
##
     expected loss:
                                             10.73221
bncv <- bn.cv(a,BC_cbl,loss="log1",loss.args = list(target="BC"),debug=T)</pre>
## Warning in check.unused.args(extra.args, valid.args): unused argument(s):
## target
## * splitting 20000 data in 10 subsets.
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
     > log-likelihood loss for node BreastDensity is 1.030255.
##
##
     > log-likelihood loss for node Location is 1.384996.
##
     > log-likelihood loss for node Age is 1.189759.
##
     > log-likelihood loss for node BC is 0.879518.
##
     > log-likelihood loss for node Mass is 0.574950.
##
     > log-likelihood loss for node AD is 0.382096.
##
     > log-likelihood loss for node Metastasis is 0.126285.
##
     > log-likelihood loss for node MC is 0.335890.
##
     > log-likelihood loss for node Size is 0.337169.
##
     > log-likelihood loss for node Shape is 0.315042.
##
     > log-likelihood loss for node FibrTissueDev is 0.623347.
##
     > log-likelihood loss for node LymphNodes is 0.347303.
##
     > log-likelihood loss for node SkinRetract is 0.418002.
##
     > log-likelihood loss for node NippleDischarge is 0.446684.
##
     > log-likelihood loss for node Spiculation is 0.486346.
##
     > log-likelihood loss for node Margin is 0.170600.
##
     @ total loss is 9.048242 .
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
     > log-likelihood loss for node BreastDensity is 1.033977.
##
##
     > log-likelihood loss for node Location is 1.381462.
##
     > log-likelihood loss for node Age is 1.201238.
##
     > log-likelihood loss for node BC is 0.871718.
##
     > log-likelihood loss for node Mass is 0.558205.
##
     > log-likelihood loss for node AD is 0.364495.
##
     > log-likelihood loss for node Metastasis is 0.127872.
##
     > log-likelihood loss for node MC is 0.353685.
##
     > log-likelihood loss for node Size is 0.332463.
##
     > log-likelihood loss for node Shape is 0.301827.
##
     > log-likelihood loss for node FibrTissueDev is 0.642236.
##
     > log-likelihood loss for node LymphNodes is 0.332941.
##
     > log-likelihood loss for node SkinRetract is 0.428725.
##
     > log-likelihood loss for node NippleDischarge is 0.419254.
     > log-likelihood loss for node Spiculation is 0.509892.
##
##
     > log-likelihood loss for node Margin is 0.168618.
     @ total loss is 9.028606 .
```

```
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
##
    > log-likelihood loss for node BreastDensity is 1.033977.
##
    > log-likelihood loss for node Location is 1.379484.
##
    > log-likelihood loss for node Age is 1.206621.
    > log-likelihood loss for node BC is 0.866773.
##
##
    > log-likelihood loss for node Mass is 0.571413.
##
    > log-likelihood loss for node AD is 0.399776.
##
    > log-likelihood loss for node Metastasis is 0.138560.
##
    > log-likelihood loss for node MC is 0.343679.
##
    > log-likelihood loss for node Size is 0.358865.
##
    > log-likelihood loss for node Shape is 0.313509.
##
    > log-likelihood loss for node FibrTissueDev is 0.625263.
##
    > log-likelihood loss for node LymphNodes is 0.339830.
##
    > log-likelihood loss for node SkinRetract is 0.426598.
##
    > log-likelihood loss for node NippleDischarge is 0.445079.
##
    > log-likelihood loss for node Spiculation is 0.474670.
##
    > log-likelihood loss for node Margin is 0.197217.
##
    @ total loss is 9.121313 .
## -----
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
    > log-likelihood loss for node BreastDensity is 1.016234.
##
##
    > log-likelihood loss for node Location is 1.384000.
##
    > log-likelihood loss for node Age is 1.207468.
##
    > log-likelihood loss for node BC is 0.867267.
##
    > log-likelihood loss for node Mass is 0.563447.
##
    > log-likelihood loss for node AD is 0.356436.
##
    > log-likelihood loss for node Metastasis is 0.145616.
##
    > log-likelihood loss for node MC is 0.335520.
##
    > log-likelihood loss for node Size is 0.342909.
##
    > log-likelihood loss for node Shape is 0.328932.
##
    > log-likelihood loss for node FibrTissueDev is 0.641469.
##
    > log-likelihood loss for node LymphNodes is 0.347673.
##
    > log-likelihood loss for node SkinRetract is 0.424056.
##
    > log-likelihood loss for node NippleDischarge is 0.442624.
##
    > log-likelihood loss for node Spiculation is 0.495071.
##
    > log-likelihood loss for node Margin is 0.181371.
    @ total loss is 9.080093 .
##
## -----
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
##
    > log-likelihood loss for node BreastDensity is 1.029002.
##
    > log-likelihood loss for node Location is 1.382629.
##
    > log-likelihood loss for node Age is 1.211219.
##
    > log-likelihood loss for node BC is 0.876746.
##
    > log-likelihood loss for node Mass is 0.568411.
##
    > log-likelihood loss for node AD is 0.359373.
##
    > log-likelihood loss for node Metastasis is 0.128843.
##
    > log-likelihood loss for node MC is 0.334368.
##
    > log-likelihood loss for node Size is 0.355771.
##
    > log-likelihood loss for node Shape is 0.309850.
    > log-likelihood loss for node FibrTissueDev is 0.624260.
```

```
##
     > log-likelihood loss for node LymphNodes is 0.365184.
##
     > log-likelihood loss for node SkinRetract is 0.435986.
##
     > log-likelihood loss for node NippleDischarge is 0.425691.
##
     > log-likelihood loss for node Spiculation is 0.474202.
##
     > log-likelihood loss for node Margin is 0.165899.
##
     @ total loss is 9.047435 .
   ______
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
##
     > log-likelihood loss for node BreastDensity is 1.028022.
     > log-likelihood loss for node Location is 1.382318.
##
     > log-likelihood loss for node Age is 1.231995.
##
     > log-likelihood loss for node BC is 0.843704.
##
     > log-likelihood loss for node Mass is 0.550439.
##
     > log-likelihood loss for node AD is 0.385487.
##
     > log-likelihood loss for node Metastasis is 0.148081.
##
     > log-likelihood loss for node MC is 0.353395.
##
     > log-likelihood loss for node Size is 0.334094.
##
     > log-likelihood loss for node Shape is 0.287615.
##
     > log-likelihood loss for node FibrTissueDev is 0.637738.
##
     > log-likelihood loss for node LymphNodes is 0.352085.
##
     > log-likelihood loss for node SkinRetract is 0.452968.
##
     > log-likelihood loss for node NippleDischarge is 0.420431.
     > log-likelihood loss for node Spiculation is 0.470118.
##
     > log-likelihood loss for node Margin is 0.164146.
##
     @ total loss is 9.042633 .
## -
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
##
     > log-likelihood loss for node BreastDensity is 1.038228.
##
     > log-likelihood loss for node Location is 1.385197.
##
     > log-likelihood loss for node Age is 1.209743.
##
     > log-likelihood loss for node BC is 0.850499.
##
     > log-likelihood loss for node Mass is 0.570395.
##
     > log-likelihood loss for node AD is 0.379295.
##
     > log-likelihood loss for node Metastasis is 0.142859.
##
     > log-likelihood loss for node MC is 0.351237.
##
     > log-likelihood loss for node Size is 0.334331.
##
     > log-likelihood loss for node Shape is 0.291664.
##
     > log-likelihood loss for node FibrTissueDev is 0.635486.
     > log-likelihood loss for node LymphNodes is 0.330478.
##
##
     > log-likelihood loss for node SkinRetract is 0.445779.
     > log-likelihood loss for node NippleDischarge is 0.427793.
##
##
     > log-likelihood loss for node Spiculation is 0.471017.
     > log-likelihood loss for node Margin is 0.175680.
     @ total loss is 9.039681 .
##
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
##
    > log-likelihood loss for node BreastDensity is 1.021200.
##
    > log-likelihood loss for node Location is 1.383945.
##
    > log-likelihood loss for node Age is 1.210141.
##
    > log-likelihood loss for node BC is 0.865670.
     > log-likelihood loss for node Mass is 0.596426.
```

```
##
     > log-likelihood loss for node AD is 0.381613.
##
     > log-likelihood loss for node Metastasis is 0.145536.
##
     > log-likelihood loss for node MC is 0.335588.
##
     > log-likelihood loss for node Size is 0.349817.
##
     > log-likelihood loss for node Shape is 0.305478.
##
     > log-likelihood loss for node FibrTissueDev is 0.634805.
     > log-likelihood loss for node LymphNodes is 0.347218.
##
##
     > log-likelihood loss for node SkinRetract is 0.449045.
##
     > log-likelihood loss for node NippleDischarge is 0.435177.
##
     > log-likelihood loss for node Spiculation is 0.492143.
     > log-likelihood loss for node Margin is 0.174433.
     @ total loss is 9.128236 .
##
##
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
##
     > log-likelihood loss for node BreastDensity is 1.042566.
##
     > log-likelihood loss for node Location is 1.383412.
##
     > log-likelihood loss for node Age is 1.211938.
##
     > log-likelihood loss for node BC is 0.840373.
##
     > log-likelihood loss for node Mass is 0.561392.
##
     > log-likelihood loss for node AD is 0.371731.
##
     > log-likelihood loss for node Metastasis is 0.124461.
##
     > log-likelihood loss for node MC is 0.323418.
     > log-likelihood loss for node Size is 0.324547.
##
##
     > log-likelihood loss for node Shape is 0.307674.
##
     > log-likelihood loss for node FibrTissueDev is 0.641973.
##
     > log-likelihood loss for node LymphNodes is 0.334497.
     > log-likelihood loss for node SkinRetract is 0.441248.
##
##
     > log-likelihood loss for node NippleDischarge is 0.432658.
##
     > log-likelihood loss for node Spiculation is 0.477026.
##
     > log-likelihood loss for node Margin is 0.178172.
##
     @ total loss is 8.997087 .
  ______
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
     > log-likelihood loss for node BreastDensity is 1.026414.
##
##
     > log-likelihood loss for node Location is 1.381599.
##
     > log-likelihood loss for node Age is 1.223409.
##
     > log-likelihood loss for node BC is 0.853779.
##
     > log-likelihood loss for node Mass is 0.544816.
##
     > log-likelihood loss for node AD is 0.380025.
##
     > log-likelihood loss for node Metastasis is 0.143291.
##
     > log-likelihood loss for node MC is 0.344351.
##
     > log-likelihood loss for node Size is 0.344170.
##
     > log-likelihood loss for node Shape is 0.296778.
##
     > log-likelihood loss for node FibrTissueDev is 0.624222.
##
     > log-likelihood loss for node LymphNodes is 0.350545.
##
     > log-likelihood loss for node SkinRetract is 0.422709.
##
     > log-likelihood loss for node NippleDischarge is 0.423236.
##
     > log-likelihood loss for node Spiculation is 0.486101.
##
     > log-likelihood loss for node Margin is 0.173377.
     @ total loss is 9.018822 .
```

## \* summary of the observed values for the loss function:

```
##
     Min. 1st Qu. Median Mean 3rd Qu.
    8.997 9.031 9.045 9.055 9.072 9.128
##
bncv
##
##
    k-fold cross-validation for Bayesian networks
##
##
    target network structure:
     [BreastDensity] [Age] [BC|Age] [Location|BC] [Mass|BreastDensity:BC] [AD|BC]
##
##
     [Metastasis|BC] [MC|BC] [Size|Mass] [Shape|Mass] [FibrTissueDev|AD]
##
     [LymphNodes|Metastasis] [SkinRetract|BC:FibrTissueDev]
##
     [NippleDischarge | BC:FibrTissueDev] [Spiculation | FibrTissueDev]
##
     [Margin|Mass:Spiculation]
    number of subsets:
##
                                      10
##
    loss function:
                                      Log-Likelihood Loss (disc.)
##
    expected loss:
                                      9.055215
nbncv <- bn.cv(a,netnb,loss="pred",loss.args = list(target="BC"),debug=T)</pre>
## * splitting 20000 data in 10 subsets.
## -----
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
   > classification error for node BC is 0.139 .
    @ total loss is 0.139 .
## -----
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
   > classification error for node BC is 0.134 .
   @ total loss is 0.134 .
## -----
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
   > classification error for node BC is 0.1425 .
   @ total loss is 0.1425 .
##
## -----
## * fitting the parameters of the network from the training sample.
\#\# * applying the loss function to the data from the test sample.
   > classification error for node BC is 0.1385 .
   @ total loss is 0.1385 .
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
   > classification error for node BC is 0.146 .
   @ total loss is 0.146 .
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
   > classification error for node BC is 0.1275 .
   @ total loss is 0.1275 .
## -----
```

## \* fitting the parameters of the network from the training sample.

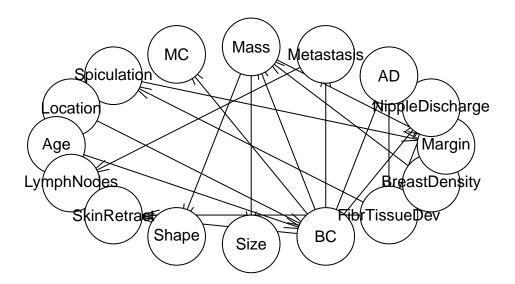
```
## * applying the loss function to the data from the test sample.
   > classification error for node BC is 0.146 .
   @ total loss is 0.146 .
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
   > classification error for node BC is 0.144 .
    @ total loss is 0.144 .
## -----
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
   > classification error for node BC is 0.1345 .
   @ total loss is 0.1345 .
## -----
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
   > classification error for node BC is 0.1345 .
   @ total loss is 0.1345 .
## -----
## * summary of the observed values for the loss function:
     Min. 1st Qu. Median Mean 3rd Qu.
## 0.1275 0.1345 0.1388 0.1386 0.1436 0.1460
nbncv
##
##
    k-fold cross-validation for Bayesian networks
##
##
    target network structure:
##
     [Naive Bayes Classifier]
##
    number of subsets:
                                      10
##
    loss function:
                                      Classification Error
##
    training node:
    expected loss:
                                      0.13865
bncv <- bn.cv(a,BC_cbl,loss="pred",loss.args = list(target="BC"),debug=T)</pre>
## * splitting 20000 data in 10 subsets.
## -----
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
   > classification error for node BC is 0.3965 .
   @ total loss is 0.3965 .
## -----
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
   > classification error for node BC is 0.3815 .
   @ total loss is 0.3815 .
## * fitting the parameters of the network from the training sample.
\#\# * applying the loss function to the data from the test sample.
## > classification error for node BC is 0.376 .
## @ total loss is 0.376 .
```

```
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
   > classification error for node BC is 0.374 .
   @ total loss is 0.374 .
## -----
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
   > classification error for node BC is 0.3815 .
   @ total loss is 0.3815 .
## -----
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
   > classification error for node BC is 0.375 .
   @ total loss is 0.375 .
## -----
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
   > classification error for node BC is 0.3785 .
   @ total loss is 0.3785 .
## -----
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
   > classification error for node BC is 0.362 .
   @ total loss is 0.362 .
##
## -----
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
\#\# > classification error for node BC is 0.38 .
   @ total loss is 0.38 .
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
\#\# > classification error for node BC is 0.3755 .
   @ total loss is 0.3755 .
## * summary of the observed values for the loss function:
   Min. 1st Qu. Median Mean 3rd Qu.
## 0.3620 0.3751 0.3772 0.3780 0.3811 0.3965
bncv
##
##
    k-fold cross-validation for Bayesian networks
##
##
    target network structure:
##
     [BreastDensity] [Age] [BC|Age] [Location|BC] [Mass|BreastDensity:BC] [AD|BC]
     [Metastasis|BC] [MC|BC] [Size|Mass] [Shape|Mass] [FibrTissueDev|AD]
##
##
     [LymphNodes|Metastasis] [SkinRetract|BC:FibrTissueDev]
##
     [NippleDischarge | BC:FibrTissueDev] [Spiculation | FibrTissueDev]
##
     [Margin|Mass:Spiculation]
    number of subsets:
##
                                       10
##
    loss function:
                                       Classification Error
##
    training node:
                                       BC
```

```
Read in manually constructed network:
manual = read.net("bc.net")
#manual
\#manNet = bn.fit(manual,a)
names(manual)
## [1] "MC"
                         "Spiculation"
                                          "Location"
## [4] "Age"
                         "LymphNodes"
                                          "SkinRetract"
                         "Size"
                                          "BC"
## [7] "Shape"
## [10] "FibrTissueDev"
                         "BreastDensity"
                                          "Margin"
## [13] "NippleDischarge" "AD"
                                          "Metastasis"
## [16] "Mass"
names(BC_cbl)
## [1] "learning" "nodes"
                            "arcs"
typeof(manual)
## [1] "list"
typeof(BC_cbl)
## [1] "list"
test <- bn.net(manual)
plot(test)
bncv <- bn.cv(a,test,loss="pred",loss.args = list(target="BC"),debug=T)</pre>
## * splitting 20000 data in 10 subsets.
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
\#\# > classification error for node BC is 0.3675 .
## @ total loss is 0.3675 .
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
\#\# > classification error for node BC is 0.3785 .
   @ total loss is 0.3785 .
## -----
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
```

0.37805

expected loss:



```
> classification error for node BC is 0.3765 .
##
    @ total loss is 0.3765 .
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
   > classification error for node BC is 0.3655 .
##
   @ total loss is 0.3655 .
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
    > classification error for node BC is 0.366 .
     @ total loss is 0.366 .
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
    > classification error for node BC is 0.3825 .
##
    @ total loss is 0.3825 .
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
   > classification error for node BC is 0.3835 .
   @ total loss is 0.3835 .
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
```

```
> classification error for node BC is 0.3855 .
    @ total loss is 0.3855 .
##
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
    > classification error for node BC is 0.3835 .
     @ total loss is 0.3835 .
## ----
## * fitting the parameters of the network from the training sample.
## * applying the loss function to the data from the test sample.
    > classification error for node BC is 0.3915 .
    @ total loss is 0.3915 .
## * summary of the observed values for the loss function:
     Min. 1st Qu. Median
                             Mean 3rd Qu.
## 0.3655 0.3698 0.3805 0.3780 0.3835 0.3915
#manbncv <- bn.cv(a,manual,loss="logl",loss.args = list(target="BC"),debug=T)</pre>
#manbncv
```

# library(ROCR), <sup>1</sup> [?] Sing et al. (2005)

## 5 Attachment A

#### 5.1 Iris dataset

#### 5.1.1 other discretizations:

```
NewIris <- discretize(iris, method = 'interval', breaks = 3, ibreaks = 3)

## Warning in check.unused.args(extra.args,
## discretization.extra.args[[method]]): unused argument(s): ibreaks

NewIris1 <- discretize(iris, method = 'interval', breaks = 100, ibreaks = 10)

## Warning in check.unused.args(extra.args,
## discretization.extra.args[[method]]): unused argument(s): ibreaks

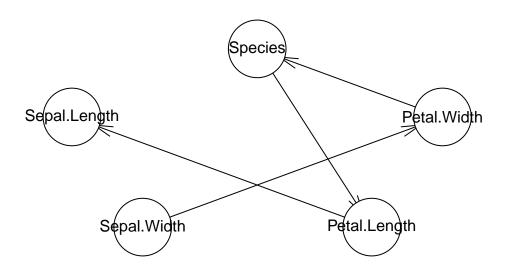
NewIrisNetHc <- tabu(NewIris)
NewIrisNetGs <- iamb(NewIris)

NewIrisNetHc

## Bayesian network learned via Score-based methods
## model:</pre>
```

<sup>&</sup>lt;sup>1</sup>Tobias Sing, Oliver Sander, Niko Beerenwinkel, Thomas Lengauer. ROCR: visualizing classifier performance in R. Bioinformatics 21(20):3940-3941 (2005).

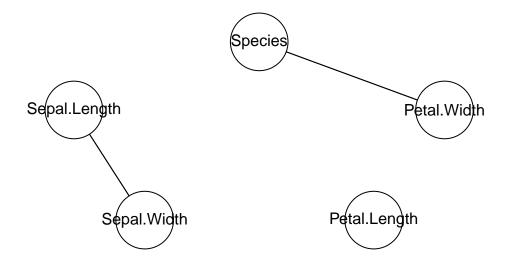
```
[Sepal.Width] [Petal.Width|Sepal.Width] [Species|Petal.Width]
##
      [Petal.Length|Species] [Sepal.Length|Petal.Length]
##
     nodes:
##
##
     arcs:
                                              4
                                              0
##
       undirected arcs:
##
       directed arcs:
##
     average markov blanket size:
                                              1.60
##
     average neighbourhood size:
                                              1.60
##
     average branching factor:
                                              0.80
##
##
     learning algorithm:
                                              Tabu Search
##
                                              BIC (disc.)
     score:
     penalization coefficient:
                                              2.505318
##
##
     tests used in the learning procedure:
                                              114
##
     optimized:
                                              TRUE
NewIrisNetGs
##
##
     Bayesian network learned via Constraint-based methods
##
##
     model:
##
       [undirected graph]
##
    nodes:
                                              5
##
     arcs:
                                              2
                                              2
##
       undirected arcs:
##
       directed arcs:
     average markov blanket size:
                                              0.80
##
##
     average neighbourhood size:
                                              0.80
     average branching factor:
                                              0.00
##
##
##
     learning algorithm:
                                              IAMB
##
     conditional independence test:
                                              Mutual Information (disc.)
##
     alpha threshold:
                                              0.05
##
     tests used in the learning procedure:
                                              32
##
     optimized:
                                              TRUE
plot(NewIrisNetHc)
plot(NewIrisNetGs)
NewIrisNetHc1 <- tabu(NewIris)</pre>
NewIrisNetGs1 <- iamb(NewIris)</pre>
NewIrisNetHc1
##
##
     Bayesian network learned via Score-based methods
##
##
     model:
      [Sepal.Width] [Petal.Width|Sepal.Width] [Species|Petal.Width]
##
```



```
##
      [Petal.Length|Species] [Sepal.Length|Petal.Length]
##
     nodes:
##
     arcs:
                                              4
                                              0
##
       undirected arcs:
##
       directed arcs:
                                              4
##
     average markov blanket size:
                                             1.60
##
     average neighbourhood size:
                                             1.60
##
     average branching factor:
                                             0.80
##
                                             Tabu Search
##
     learning algorithm:
                                             BIC (disc.)
##
     score:
##
     penalization coefficient:
                                              2.505318
##
     tests used in the learning procedure:
                                             114
##
     optimized:
                                              TRUE
```

#### NewIrisNetGs1

## ## Bayesian network learned via Constraint-based methods ## ## model: ## [undirected graph] ## nodes: 5 ## arcs: 2 ## undirected arcs: 2



```
##
       directed arcs:
                                             0.80
##
     average markov blanket size:
##
     average neighbourhood size:
                                             0.80
##
     average branching factor:
                                             0.00
##
     learning algorithm:
##
                                             IAMB
##
     conditional independence test:
                                             Mutual Information (disc.)
##
     alpha threshold:
                                             0.05
                                             32
##
     tests used in the learning procedure:
                                             TRUE
##
     optimized:
```

#### 5.1.2 Values of hartemink

```
for( bins in c(3,5,7)){
  tmp=discretize(iris[-5], method = 'hartemink',ibreaks=bins)
  NewIris = cbind(tmp,iris[5])

IrisNetsb <- tabu(NewIris)

print(IrisNetsb)
}</pre>
```

##

```
##
     Bayesian network learned via Score-based methods
##
##
##
      [Sepal.Width] [Petal.Width|Sepal.Width] [Species|Petal.Width]
##
      [Petal.Length|Species] [Sepal.Length|Petal.Length]
##
##
     arcs:
                                              4
                                              0
##
       undirected arcs:
##
       directed arcs:
##
     average markov blanket size:
                                              1.60
##
     average neighbourhood size:
                                              1.60
                                              0.80
##
     average branching factor:
##
##
     learning algorithm:
                                              Tabu Search
##
     score:
                                              BIC (disc.)
##
     penalization coefficient:
                                              2.505318
##
     tests used in the learning procedure: 106
##
                                              TRUE
##
##
##
     Bayesian network learned via Score-based methods
##
##
     model:
##
      [Sepal.Length] [Petal.Length|Sepal.Length] [Petal.Width|Petal.Length]
##
      [Species|Petal.Width][Sepal.Width|Species]
##
     nodes:
                                              5
##
     arcs:
                                              4
##
       undirected arcs:
                                              0
##
                                              4
       directed arcs:
                                              1.60
##
     average markov blanket size:
##
     average neighbourhood size:
                                              1.60
##
     average branching factor:
                                              0.80
##
##
     learning algorithm:
                                              Tabu Search
                                              BIC (disc.)
##
     score:
##
     penalization coefficient:
                                              2.505318
##
     tests used in the learning procedure:
                                             106
##
     optimized:
                                              TRUE
##
##
##
     Bayesian network learned via Score-based methods
##
##
     model:
##
      [Sepal.Length] [Petal.Length|Sepal.Length] [Petal.Width|Petal.Length]
##
      [Sepal.Width|Petal.Width] [Species|Petal.Width]
     nodes:
##
##
                                              4
     arcs:
                                              0
##
       undirected arcs:
##
       directed arcs:
##
     average markov blanket size:
                                              1.60
##
     average neighbourhood size:
                                              1.60
     average branching factor:
                                              0.80
##
##
##
     learning algorithm:
                                              Tabu Search
```

```
BIC (disc.)
##
     score:
    penalization coefficient:
##
                                             2.505318
##
     tests used in the learning procedure: 114
                                             TRUE
##
     optimized:
for (bins in c(3,5,7)){
tmp=discretize(iris[-5], method = 'hartemink',ibreaks=bins)
NewIris = cbind(tmp,iris[5])
IrisNetcb <- iamb(NewIris)</pre>
print(IrisNetcb)
}
##
##
     Bayesian network learned via Constraint-based methods
##
##
    model:
##
       [undirected graph]
##
    nodes:
                                             5
##
    arcs:
                                             2
##
       undirected arcs:
                                             2
##
       directed arcs:
     average markov blanket size:
                                             0.80
##
                                             0.80
##
     average neighbourhood size:
##
     average branching factor:
                                             0.00
##
     learning algorithm:
##
                                             IAMB
##
     conditional independence test:
                                             Mutual Information (disc.)
                                             0.05
##
     alpha threshold:
##
     tests used in the learning procedure:
                                             33
##
     optimized:
                                             TRUE
##
##
##
     Bayesian network learned via Constraint-based methods
##
##
     model:
##
       [undirected graph]
##
     nodes:
                                             5
                                             4
##
    arcs:
##
       undirected arcs:
                                             4
##
       directed arcs:
                                             1.60
##
     average markov blanket size:
##
     average neighbourhood size:
                                             1.60
                                             0.00
##
     average branching factor:
##
##
     learning algorithm:
                                             IAMB
##
     conditional independence test:
                                             Mutual Information (disc.)
##
     alpha threshold:
                                             0.05
##
     tests used in the learning procedure:
                                             42
##
     optimized:
                                             TRUE
##
##
##
     Bayesian network learned via Constraint-based methods
```

```
##
##
     model:
       [partially directed graph]
##
##
     nodes:
                                              5
##
     arcs:
                                              3
##
       undirected arcs:
                                              1
##
       directed arcs:
                                              1.60
     average markov blanket size:
##
##
     average neighbourhood size:
                                              1.20
##
     average branching factor:
                                              0.40
##
##
     learning algorithm:
                                              IAMB
     conditional independence test:
                                              Mutual Information (disc.)
##
                                              0.05
##
     alpha threshold:
##
     tests used in the learning procedure:
                                              36
##
     optimized:
                                              TRUE
```

#### 5.2 BC Dataset

#### 5.2.1 values depending on size

```
for(part in c(1,2,10)){
   ind = sample(1:(nrow(a)/part))
   BC <- a[ind,]

  BC_cbl <- tabu(BC)

  print(BC_cbl)
}

##
## Bayesian network learned via Score-based methods
###</pre>
```

```
##
##
##
      [BreastDensity] [Age] [BC|Age] [Location|BC] [Mass|BreastDensity:BC] [AD|BC]
##
      [Metastasis|BC] [MC|BC] [Size|Mass] [Shape|Mass] [FibrTissueDev|AD]
##
      [LymphNodes|Metastasis] [SkinRetract|BC:FibrTissueDev]
      [NippleDischarge|BC:FibrTissueDev] [Spiculation|FibrTissueDev]
##
##
      [Margin|Mass:Spiculation]
##
     nodes:
                                              16
                                              18
##
     arcs:
##
       undirected arcs:
##
       directed arcs:
                                              18
##
     average markov blanket size:
                                              2.62
##
     average neighbourhood size:
                                              2.25
##
     average branching factor:
                                              1.12
##
##
     learning algorithm:
                                              Tabu Search
##
     score:
                                              BIC (disc.)
##
     penalization coefficient:
                                              4.951744
##
     tests used in the learning procedure:
                                              TRUE
##
     optimized:
```

```
##
##
##
     Bayesian network learned via Score-based methods
##
##
##
      [BreastDensity] [Age] [BC|Age] [Location|BC] [Mass|BreastDensity:BC] [AD|BC]
      [Metastasis|BC] [MC|BC] [Size|Mass] [Shape|Mass] [FibrTissueDev|AD]
##
      [LymphNodes|Metastasis] [SkinRetract|BC:FibrTissueDev]
##
##
      [NippleDischarge|BC:FibrTissueDev] [Spiculation|FibrTissueDev]
##
      [Margin|Mass:Spiculation]
##
     nodes:
                                              16
##
                                              18
     arcs:
       undirected arcs:
                                              0
##
##
       directed arcs:
                                              18
##
     average markov blanket size:
                                              2.62
##
     average neighbourhood size:
                                              2.25
##
     average branching factor:
                                              1.12
##
                                              Tabu Search
##
     learning algorithm:
                                              BIC (disc.)
##
     score:
##
     penalization coefficient:
                                              4.60517
##
     tests used in the learning procedure:
                                              960
##
     optimized:
                                              TRUE
##
##
##
     Bayesian network learned via Score-based methods
##
##
     model:
##
      [BreastDensity] [Location] [FibrTissueDev] [NippleDischarge|FibrTissueDev]
##
      [Spiculation|FibrTissueDev] [BC|NippleDischarge] [Age|BC] [Mass|BC]
      [AD|BC:FibrTissueDev] [Metastasis|BC] [MC|BC]
##
##
      [SkinRetract|BC:FibrTissueDev] [Size|Mass] [Shape|Mass]
      [LymphNodes|Metastasis] [Margin|Mass:Spiculation]
##
##
     nodes:
                                              16
##
     arcs:
       undirected arcs:
##
##
       directed arcs:
                                              16
##
     average markov blanket size:
                                              2.25
     average neighbourhood size:
                                              2.00
##
##
     average branching factor:
                                              1.00
##
                                              Tabu Search
##
     learning algorithm:
##
                                              BIC (disc.)
##
     penalization coefficient:
                                              3.800451
##
     tests used in the learning procedure:
                                              641
##
     optimized:
                                              TRUE
for(part in c(1,2,10)){
    ind = sample(1:(nrow(a)/part))
    BC <- a[ind,]
    BC_sbl <- iamb(BC)</pre>
    print(BC sbl)
```

```
##
##
     Bayesian network learned via Constraint-based methods
##
##
##
       [partially directed graph]
##
     nodes:
                                             16
##
     arcs:
                                             13
##
       undirected arcs:
                                             7
##
       directed arcs:
##
     average markov blanket size:
                                             2.12
##
     average neighbourhood size:
                                             1.62
##
     average branching factor:
                                             0.38
##
##
     learning algorithm:
                                             IAMB
     conditional independence test:
##
                                             Mutual Information (disc.)
     alpha threshold:
                                             0.05
##
     tests used in the learning procedure: 592
##
##
     optimized:
                                             TRUE
##
##
##
     Bayesian network learned via Constraint-based methods
##
##
##
       [partially directed graph]
##
     nodes:
                                             16
##
     arcs:
                                             13
##
       undirected arcs:
                                             7
##
       directed arcs:
##
     average markov blanket size:
                                            2.12
##
     average neighbourhood size:
                                             1.62
##
     average branching factor:
                                             0.38
##
##
     learning algorithm:
                                             IAMB
##
     conditional independence test:
                                             Mutual Information (disc.)
##
     alpha threshold:
                                             0.05
##
     tests used in the learning procedure: 619
                                             TRUE
##
     optimized:
##
##
##
     Bayesian network learned via Constraint-based methods
##
##
     model:
##
       [partially directed graph]
##
     nodes:
                                             16
##
     arcs:
                                             12
##
       undirected arcs:
                                             7
##
       directed arcs:
    average markov blanket size:
                                             2.00
##
                                            1.50
##
     average neighbourhood size:
##
     average branching factor:
                                             0.31
##
```

## learning algorithm: IAMB

## conditional independence test: Mutual Information (disc.)

## alpha threshold: 0.05
## tests used in the learning procedure: 596
## optimized: TRUE

## 5.3 NHL dataset

### 5.3.1 Values of the networks

INSERTXXX

6 list of figures

List of Figures

# 7 references

Sing, Tobias, Oliver Sander, Niko Beerenwinkel, and Thomas Lengauer. 2005. "ROCR: visualizing Classifier Performance in R." Bioinformatics (Oxford, England) 21 (20): 3940–1. doi:10.1093/bioinformatics/bti623. http://bioinformatics.oxfordjournals.org/content/21/20/3940.abstract.