

Determined number of key parameters for cancer detection

All parameters described in "Established set of general parameters.doc". Below is determined the process of lung cancer detection and diagnosis.

Diagnosis

Diagnosis:

Diagnosis code	Diagnosis name
D_NG	Negative
D_LN	Lymph node
D_MT	Metastasis
D_MR	Morphology
D_TN	Tumor

Values of diagnosis:

Code of diagnosis value	Name of diagnosis value
D_NG_1	No observation
D_NG_2	Observation
D_NG_3	CT after 3 months
D_NG_4	CT after 3-6 months
D_NG_5	CT after 6-12 months
D_NG_6	CT after 12 months
D_NG_7	CT after 12 months for 3 years
D_NG_8	CT after 3, 9, 24 months
D_NG_9	CT after 9-12 and 24 months
D_NG_10	CT after 18-24 months
D_NG_11	CT after 24 and 48 months
D_LN_1	N0
D_LN_2	N1
D_LN_3	N2
D_LN_4	N3
D_LN_5	Nx
D_MT_1	M0
D_MT_2	M1
D_MT_3	M1a

Code of diagnosis value	Name of diagnosis value
D_MT_4	M1b
D_MT_5	Mx
D_MR_1	G1
D_MR_2	G2
D_MR_3	G3
D_MR_4	Non small cell lung cancer
D_MR_5	Small cell
D_MR_6	Undifferentiated
D_TN_1	T0
D_TN_2	T1
D_TN_3	T2
D_TN_4	T3
D_TN_5	T4
D_TN_6	Tis
D_TN_7	Tx

Algorithm rules

Rules:

1. If C_R_11 and (C_R_7 or C_R_8) and no C_S, then next method is M_LCT
2. If C_R_6-C_R_8 and (C_S_6 or C_S_8) and C_S_2-C_S_12, then next method is M_XRY
3. If C_R_1-C_R_5 and (C_S_6 or C_S_8) and C_S_2-C_S_12, then next method is M_XRY
4. If C_R_9-C_R_13 and (C_S_6 or C_S_8) and C_S_2-C_S_12, then next method is M_XRY
5. If C_S_12, then next method is M_NUS
6. If M_NUS is R_P, then next method is M_CTG and diagnosis is D_LN_4
7. If M_XRY is (R_6 or R_8 or R_10 or R_11 or R_12 or R_13), then next method is M_CTG
8. If (M_CTG or M_LCT) is R_LSND_1, then D_NG_1
9. If (M_CTG or M_LCT) is R_LSND_2, then D_NG_3
10. If (M_CTG or M_LCT) is R_LSND_3, then next method is (M_PTG or M_BPS)
11. If (M_CTG or M_LCT) is R_LSND_2 and R_LSND_17, then D_NG_7
12. If (M_CTG or M_LCT) is R_LSND_2 and R_LSND_16, then next method is (M_PTG or M_BPS)
13. If (M_CTG or M_LCT) is R_LSND_11, then D_NG_3
14. If (M_CTG or M_LCT) is R_LSND_12, then next method is M_PTG
15. If (M_CTG or M_LCT) is R_LSND_12 and R_LSND_17, then D_NG_7
16. If (M_CTG or M_LCT) is R_LSND_12 and R_LSND_16, then next method is M_BPS
17. If (M_CTG or M_LCT) is R_LSND_13, then next method is M_BPS
18. If (M_CTG or M_LCT) is R_LSND_8, then D_NG_11
19. If (M_CTG or M_LCT) is R_LSND_9, then D_NG_3
20. If (M_CTG or M_LCT) is R_LSND_9 and R_LSND_17, then D_NG_7
21. If (M_CTG or M_LCT) is R_LSND_10, then D_NG_3
22. If (M_CTG or M_LCT) is R_LSND_10 and R_LSND_16, then next method is M_BPS
23. If (M_CTG or M_LCT) is R_LSND_4 and no C_R, then D_NG
24. If (M_CTG or M_LCT) is R_LSND_4 and (C_R_7 or C_R_8) and C_R_11, then D_NG_6
25. If (M_CTG or M_LCT) is R_LSND_4 and (C_R_7 or C_R_8) and C_R_11 and R_LSND_17, then D_NG
26. If (M_CTG or M_LCT) is R_LSND_4 and (C_R_7 or C_R_8) and C_R_11 and R_LSND_16, then next method is (M_PTG or M_BPS)
27. If (M_CTG or M_LCT) is R_LSND_5 and no C_R, then D_NG_6
28. If (M_CTG or M_LCT) is R_LSND_5 and no C_R and R_LSND_17, then D_NG
29. If (M_CTG or M_LCT) is R_LSND_5 and no C_R and R_LSND_16, then next method is (M_PTG or M_BPS)
30. If (M_CTG or M_LCT) is R_LSND_5 and (C_R_7 or C_R_8) and C_R_11, then D_NG_5
31. If (M_CTG or M_LCT) is R_LSND_5 and (C_R_7 or C_R_8) and C_R_11 and R_LSND_17, then D_NG_10
32. If (M_CTG or M_LCT) is R_LSND_5 and (C_R_7 or C_R_8) and C_R_11 and R_LSND_16, then next method is (M_PTG or M_BPS)
33. If (M_CTG or M_LCT) is R_LSND_6 and no C_R, then D_NG_5
34. If (M_CTG or M_LCT) is R_LSND_6 and no C_R and R_LSND_17, then D_NG_10
35. If (M_CTG or M_LCT) is R_LSND_6 and no C_R and R_LSND_16, then next method is (M_PTG or M_BPS)
36. If (M_CTG or M_LCT) is R_LSND_6 and (C_R_7 or C_R_8) and C_R_11, then D_NG_4
37. If (M_CTG or M_LCT) is R_LSND_6 and (C_R_7 or C_R_8) and C_R_11 and R_LSND_17,

then D_NG_9

38. If (M_CTG or M_LCT) is R_LSND_6 and (C_R_7 or C_R_8) and C_R_11 and R_LSND_16, then next method is (M_PTG or M_BPS)
39. If (M_CTG or M_LCT) is R_LSND_7 and no C_R, then D_NG_8
40. If (M_CTG or M_LCT) is R_LSND_7 and (C_R_7 or C_R_8) and C_R_11, then D_NG_8
41. If (M_CTG or M_LCT) is R_11, then next method M_BRC, M_TBB, M_BPS
42. If (M_CTG or M_LCT) is R_2, then next method M_BRC and M_BPS
43. If (M_CTG or M_LCT) is R_9, then next method M_BRC and M_BPS
44. If (M_CTG or M_LCT) is R_5, then next method M_EBU, M_EUS, M_CMS, M_VMS
45. If (M_CTG or M_LCT) is R_8, then next method M_VTS,
46. If (M_CTG or M_LCT) is R_12, then next method M_VTS, M_TTB, M_BPS
47. If (M_CTG or M_LCT) is R_13, then next method M_BSG