###### Table 1. Patient Characteristics and outcome predictors for EFS by univariate analysis.

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| --- | --- | --- | --- | --- | --- | --- |
| **Patient**  **characteristics** | **Patients (N=717)**  **Number(%)** | **3-Year EFS (%)** | **5-Year EFS (%)** | **8-Year EFS (%)** | **χ2 value** | **P value** |
| **Age at diagnosis(months)** |  |  |  |  | 49.826 | <0.001 |
| <12 | 202(28.2) | 91.9±2.1 | 91.0±2.3 | 91.0±2.3 |  |  |
| 12~18 | 58(8. 1) | 75.1±6.5 | 75.1±6.5 | 75.1±6.5 |  |  |
| >18 | 457(63.7) | 62.6±2.6 | 58.3±2.8 | 56.5±3.0 |  |  |
| **Gender** |  |  |  |  | 4.960 | 0.026 |
| Male | 389(54.3) | 67.4±2.7 | 64.2±3.0 | 63.0±3.1 |  |  |
| Female | 328(45.7) | 76.9±2.6 | 74.0±2.9 | 72.9±3.0 |  |  |
| **INSS stage** |  |  |  |  | 229.029 | <0.001 |
| Stage 1 | 125(17.4) | 93.7±2.6 | 93.7±2.6 | 93.7±2.6 |  |  |
| Stage 2 | 109(15.2) | 97.0±1.7 | 97.0±1.7 | 97.0±1.7 |  |  |
| Stage3 | 196(27.3) | 83.1±3.0 | 82.1±3.1 | 82.1±3.1 |  |  |
| Stage4 | 256(35.7) | 38.3±3.6 | 30.9±3.9 | 27.3±4.2 |  |  |
| Stage4s | 31(4.3) | 96.7±3.3 | 90.6±6.6 | 90.6±6.6 |  |  |
| **Risk stratification** |  |  |  |  | 258.386 | <0.001 |
| VLR | 113(15.8) | 93.0±2.8 | 93.0±2.8 | 93.0±2.8 |  |  |
| LR | 269(37.5) | 92.9±1.6 | 92.1±1.8 | 92.1±1.8 |  |  |
| IR | 145(20.2) | 71.0±4.2 | 69.6±4.4 | 69.6±4.4 |  |  |
| HR | 190(26.5) | 29.8±4.0 | 20.4±4.1 | 16.6±4.1 |  |  |
| **Primary lesion** |  |  |  |  | 40.959 | <0.001 |
| Cervix | 21(2.9) | 95.2±4.6 | 95.2±4.6 | 95.2±4.6 |  |  |
| Thorax | 144(20.1) | 90.3±2.7 | 89.0±2.9 | 89.0±2.9 |  |  |
| Abdomen | 436(60.8) | 65.4±2.6 | 62.7±2.8 | 60.9±3.0 |  |  |
| Pelvis | 17(2.4) | 93.3±6.4 | 93.3±6.4 | 93.3±6.4 |  |  |
| Multiple lesions | 92(12.8) | 60.3±5.7 | 51.8±6.7 | 51.8±6.7 |  |  |
| **Bone invasion** |  |  |  |  | 172.806 | <0.001 |
| Yes | 184(25.7) | 34.4±4.2 | 26.6±4.3 | 22.8±4.5 |  |  |
| No | 533(74.3) | 84.6±1.7 | 83.3±1.9 | 83.3±1.9 |  |  |
| **BM invasion** |  |  |  |  | 153.596 | <0.001 |
| Yes | 203(28.3) | 38.9±4.1 | 32.1±4.2 | 30.3±4.3 |  |  |
| No | 514(71.7) | 84.7±1.8 | 83.3±1.9 | 82.5±2.1 |  |  |
| **Liver invasion** |  |  |  |  | 0.606 | 0.436 |
| YES | 72 | 73.1+-5.5 | 66.8+-6.6 | 66.8+-6.6 |  |  |
| NO | 645 | 71.7+-2.0 | 69.0+-2.2 | 67.8+-2.3 |  |  |
| ***MYCN* status** | N=618 |  |  |  | 46.581 | <0.001 |
| Amplified | 88(14.2) | 45.3±6.0 | 38.3±6.3 | 38.3±6.3 |  |  |
| Nonamplified | 530(85.8) | 77.2±2.1 | 75.6±2.3 | 73.8±2.5 |  |  |
| **LDH level(**N=524) |  |  |  |  | 104.171 | <0.001 |
| <2 times normal | 327(62.4) | 40（85.1±2.3） | 44（81.2±2.9） | 44（81.2±2.9） |  |  |
| ≥2 times normal | 197(37.6) | 99（40.5±4.0） | 104（35.6±4.1） | 105（33.3±4.4） |  |  |
| **SF level (**N=484) |  |  |  |  | 103.948 | <0.001 |
| <Upper limit of normal range | 282(58.3) | 33(86.2±2.3) | 35(83.8±2.8) | 35(83.8±2.8) |  |  |
| ≥Upper limit of normal range | 202(41.7) | 102(39.3±4.0) | 107(33.0±4.3) | 109(27.8±4.9) |  |  |
| **NSE level(**N=310) |  |  |  |  | 58.920 | <0.001 |
| <6 times normal | 202(65.2) | 92.7±2.0 | 90.6±2.8 |  |  |  |
| ≥6 times normal | 108(34.8) | 48.8±6.1 | 45.8±6.5 |  |  |  |

###### Table 2. Multivariable analysis for independent impact of risk factors on EFS.

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **P-value** | **HR** | **95% CI** |
| **Age at diagnosis** | <0.001 | 2.312 | 1.470-3.638 |
| **INSS stage** | 0.004 | 2.212 | 1.296-3.774 |
| **Primary lesion** | 0.597 | 1.086 | 0.799-1.476 |
| **Bone invasion** | 0.399 | 1.394 | 0.644-3.015 |
| **BM invasion** | 0.881 | .944 | 0.441-2.020 |
| ***MYCN* status** | 0.247 | 1.108 | 0.931-1.318 |
| **LDH level** | 0.002 | 2.717 | 1.456-5.072 |
| **SF level** | <0.001 | 3.158 | 1.690-5.900 |