Staging of Nonmelanoma Skin Cancer (NMSC)

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Over the past several years, multiple staging systems and guidelines have been established for nonmelanoma skin cancers, including the American Joint Committee on Cancer (AJCC) eighth edition and Brigham and Women's Hospital (BWH) tumor staging system. There is no universally accepted definition of what makes a tumor high-risk, but there are several widely used options. The staging systems are based on an TNM system, taking into account the tumor size and whether it has grown into nearby structures (T), whether the tumor has spread to nearby lymph nodes (N), and whether the tumor has spread to distant parts of the body (M). Higher numbers and letters mean that the cancer is more advanced. T, N, and M are used to determine a stage grouping, of which there are 5 stages. Stage 0 is the earliest stage and stage 4 is the highest stage, indicating that the cancer has spread more. The stage of the tumor can be used to help determine the best treatment plan and predict your outcome.

AJCC Staging System

The AJCC staging system takes into account the size of the tumor and whether the tumor has spread to nearby structures. Most tumors will fall within the T2 stage because T3 and T4 require that the tumor has spread to the bone, which is rare.

| T Stage | Risk Factors | | |
|---------|---|--|--|
| T1 | Tumor size <2 cm | | |
| T2 | Tumor size ≥ 2 cm & <4 cm in greatest dimension | | |
| Т3 | Tumor size ≥ 4 cm or minor bone erosion, spread to nerves, or deep spread | | |
| T4 | Tumor with spread to the bone or bone marrow | | |

BWH Staging System

The BWH staging system was developed with the goal of having more tumors with poor outcomes in higher T stages. This staging system is built on four risk factors: tumor size ≥ 2 cm, poorly differentiated histology, spread to nerves ≥ 0.1 mm, and spread beyond the fat but no spread to the bone. These risk factors have previously been associated with poor outcomes.

| T Stage | Squamous Cell Carcinoma | T Stage | Basal Cell Carcinoma |
|---------|------------------------------------|---------|--|
| T1 | No high-risk factors | T1 | Tumor diameter $< 2 \text{ cm or } \ge 2 \text{ cm}$ |
| | | | with $0 - 1$ risk factors |
| T2a | 1 high-risk factor | T2 | Tumor diameter > 2 cm or ≥ 2 risk |
| | | | factors |
| T2b | 2-3 high-risk factors | | |
| Т3 | \geq 4 high-risk factors or bone | | |
| | invasion | | |

References

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